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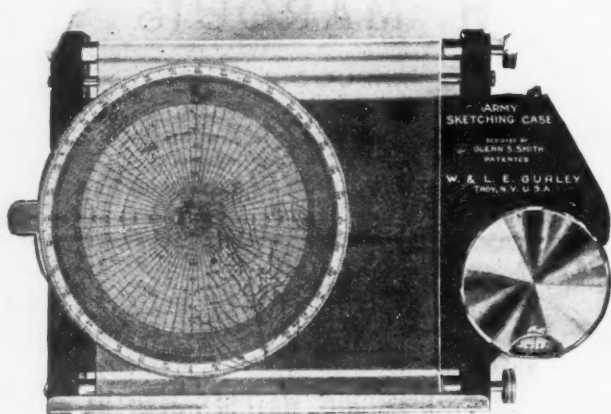
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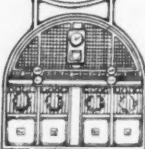
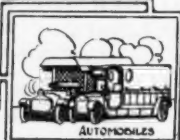
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THE CAVALRY OF TODAY.*

BY MAJOR CHARLES D. RHODES, FIFTEENTH CAVALRY.

OPINIONS regarding the organization, equipment, instruction and tactical use of cavalry, are at the present time so divergent, and in many ways so contradictory, as to leave the casual student wondering just what and what not to accept as true.

Cavalry experts had every reason to believe that the two latest wars would clear up many conflicting opinions as to the modern use of cavalry. But the war in South Africa, fought over an abnormal terrain between an illtrained, poorly led British cavalry and a meager but exceedingly mobile force of Boer mounted infantry, has furnished indeterminate data only. In Manchuria an illtrained and poorly officered mass of Cossack cavalry opposed the wonderfully systematic advance of the Japanese armies; while a poorly horsed minority of Japanese cavalry, well trained in the services of exploration and protection, rarely ventured beyond supporting distance of their splendid infantry and field artillery. The Japanese cavalry was too

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valuable an asset for reconnaissance duties to risk disaster by seeking serious combat, and it was held well in hand throughout the war.

PERSONNEL AND ORGANIZATION.

Nothing has stood out so clearly, however, in these later wars, than the fact that cavalry personnel both officers and men, must be of a higher standard than ever before to meet the tremendous demands imposed by modern campaigns. The greater dispersion of cavalry required by present-day tactics involves high physical superiority to withstand fatigue and this very dispersion also renders discipline more difficult to enforce. In his evidence before the Esher Commission on the conduct of the South African War, Lieutenant General Sir Ian Hamilton remarked:

"I would preface these remarks by venturing to express my opinion that it is more difficult to be a good cavalryman than to attain distinction in any other branch of our service."

As evidencing this fact it is worthy of note that following the Boer War, the British War Office issued an order giving the preference for cavalry service to the cadets graduating highest at the Royal Military College, on the ground that in wars of today there falls upon the cavalry officer duties of such weighty importance as to require the highest professional knowledge as well as physical ability of a special order.

The entire question of cavalry organization of today, appears to revolve about the probable use of cavalry as a mounted force or as a dismounted force; whether the horse is to be considered as the formidable weapon of the mounted arm, or merely as a means to an end.

While there is little or no doubt that improvements in arms and ammunition have imposed a greater amount of dismounted action on the cavalry than ever before, European militarists still believe in a cavalry organization which will furnish the maximum mobility, rather than an organization which will put the greatest number of rifles on the firing line. Consequently, we find European cavalry regiments usually of a strength of from 600 to 800 sabers which is about one-half to two-thirds the strength of our own regiments. This is be-

cause abroad, the use of the *arme blanche* is still strongly upheld in the tactics of the battlefield; while with us, the teachings of the great Civil War still control us in extending the strength of our regiments to the greatest number which, fairly mobile in the exceptional occasions of mounted combat, can be quickly utilized for dismounted work.

It must be confessed, however, that a regiment of 1,200 troopers is too large to be directly controlled by the colonel and that if our present organization be retained, more initiative must be delegated to squadron commanders. In many respects our cavalry regiments corresponds to European cavalry brigades with the important exception that our training does not contemplate a double-rank formation, which, if authorized might transform our rather unwidely cavalry regiments into more compact, mobile, and efficient fighting units.

One lesson, however, is clearly defined by the experience of recent wars: *That cavalry should in peace time be either kept on a war footing, or be capable of immediate expansion when war is imminent.*

As long ago as the year 1866, that distinguished soldier, General Emory Upton said:

"Keeping in mind the fact that the 60,000 to 80,000 Federal cavalry maintained from the beginning to the end of the Civil War did not become really efficient till the battle of Beverly Ford, in 1863, after it had been trained for nearly two years * * * we ought from our own experience to follow the example of European nations and as far as practicable maintain our future cavalry either on a war footing or else on a basis capable of such expansion as to meet quickly the demands of war."

ARMS AND EQUIPMENT.

As the question of the proper use of cavalry is closely related to the subject of arms and equipment, there is still much difference of opinion on this subject, both at home and abroad. Consideration of saber *versus* pistol, saber *versus* lance, rifle *versus* carbine, have all been threshed out in the service Journals *ad nauseam*. But there is almost complete unanimity of opinion that the cavalryman of today must be armed with a first-class long-range firearm.

Germany, France, and Italy still retain the lance as part of the equipment of certain cavalry regiments; and it is worthy of note that Russia, which discarded the lance during the early part of the war with Japan, is now rearming her regiments with this weapon. However, both the Boer and Russo-Japanese wars showed the unsuitability of the lance for dismounted work, just as the Civil War saw the early abandonment of this weapon by the one Federal regiment which carried it in the first year of the great conflict.

It seems logical to retain the saber for moral reasons if for no other, i. e., the trooper should feel that he must at every opportunity attempt to push boldly forward and close with the enemy. In other words, the cavalry which is prepared on the least show of resistance, to dismount to fight on foot, will lose much of its value as a reconnoitering force. For a similar reason the revolver, now of automatic pattern, is retained as an incentive to close contact, when conditions permit. But it is possible that ultimately either the saber or the revolver may be discarded in our service, the time available for the training of a trooper not permitting of expert instruction in both arms.

For the present, there appears to be nothing in the teachings of modern war calling for a change in the weapons with which both the Federal and Confederate cavalry emerged from the Civil War,—the carbine, the saber, and the revolver—except that the carbine is at present replaced by a short rifle superior perhaps to any fire-arm now in the hands of the soldiers of any nation.

Consideration of the question of equipment would not be complete without a word as to the enormous losses in horse-flesh in campaigns of today, not so much through wounds from projectiles as from the extraordinary hardships and fatigue incident to the work of the cavalry. This is the more in evidence where the cavalry must be recruited to war strength from untrained levies, ignorant of the limit of endurance of horses and careless of their duties.

We cannot forget that during the first two years of the Civil War, the Federal cavalry was furnished 284,000 horses, when the maximum number of cavalymen in the field at any one time did not exceed 60,000 during this period. During the first

two years of the Boer War, the British Remount Department furnished over 200,000 horses and 94,000 mules, when the War Office had estimated that but 25,000 animals would be required for the war. As compared with this enormous expenditure of 250 per cent. of horses for the British cavalry, the Japanese requisitions called for but 50 per cent. of remounts during fifteen months in the field.

The lesson of these great losses in horseflesh is that remount depots have become as essentially necessary for good cavalry, as recruit depots for all classes of soldiers, to supply losses in the firing-line during a severe war. Casualties among the horses must be promptly filled with good remounts or cavalry loses in *morale* and efficiency.

THE USE OF CAVALRY.

Careful study of the responsibilities imposed upon modern cavalry, seems to show that although the role of cavalry on the battlefield has been more or less contracted and limited, the *strategic role* has expanded to immense proportions.

In the period covered by the military operations of Frederick the Great, opposing armies marched and camped in such dense masses and within such comparatively short distances of each other that generals or their staff officers could usually make personal reconnaissance of the enemy. The strategic service of cavalry was therefore little developed, but as armies grew more complex in the Napoleonic era, it assumed new importance. And in the armies of today, the necessity for putting into motion thousand of different units before giving battle, demands ample and accurate information of the enemy's strength, *morale*, and probable intentions. To the cavalry falls this important duty.

Why is cavalry reconnaissance more difficult than ever before?

Cavalry is unable at the present time to tell from opposing fire, whether it has hostile cavalry or infantry in its front. Furthermore, artillery fire is "serious" to cavalry at 4500 yards, and "effective" at from 3500 to 2000 yards. At the same time, small-arms fire is "serious" at from 1800 to 1200 yards, and "effective" from 1200 to 600 yards. Reconnoitering cavalry

patrols can ordinarily, even with the aid of the best glasses, distinguish little or nothing of hostile battle-lines at distances over 1800 yards, while if they advance closer, they risk destruction by artillery or rifle fire. One modern rifle can deliver a heavier fire than several rifles used in former wars, and unless cavalry reconnoitering forces are prepared to fight for their information, they can usually develop the outline of the hostile screen in front only by negative information as to where the enemy is absent.

Again, decisive battles are no longer engagements of a day, but of a succession of days. Deployments of modern armies no longer cover a front of but a few miles, but of vast distances. At Mukden, the battle lines extended for nearly 100 miles.

And this tremendous difficulty in the way of cavalry reconnaissance extends from the operations of armies down through the manuvering of army corps, divisions, brigades, regiments, and battalions.

During the past summer, in the State of Connecticut, a most ambitious maneuver campaign was undertaken by our regular forces and National Guard. A Blue Division interposing between New York and Boston, attempted to prevent a Red Division from destroying the sources of water supply of New York City.

Each division had a regiment of cavalry at its disposal, but such were the difficult conditions imposed by the umpires on the cavalry reconnaissance that it was rare when information of the enemy's principal dispositions reached the division commanders before 12 or 1 o'clock at night. Patrols found it impossible to penetrate the barrier of infantry outposts, and officer's patrols at times covered fifty miles in order to encircle the enemy's flanks, and obtain authentic information of his main forces. Under such circumstances, intelligence comes in piecemeal, much of it of doubtful authenticity, since based on inference. The drafting of orders for the movements of the morrow are delayed until the last moment, hoping for additional news from the cavalry. And in the Connecticut Campaign the staffs of division commanders were oftentimes forced to delay the issuing of important orders until the small hours of morning, when the commanders of brigades and regiments should have

been apprised of the movements for the next day before officers and men had retired for the night.

What does all this mean? It means that when this information is not obtainable by patrols, cavalry commanders must be prepared to fight for it. If the enemy be strong in cavalry this fighting will be severe, and the mounted action of cavalry against cavalry will not be uncommon. If the enemy be weak in cavalry, opportunities will occur in the usually widely dispersed hostile lines for bold cavalry leaders of the Jeb Stuart type to slip through breaks in the screen and gain contact with the enemy's real position.

As a corollary to these modern conditions confronting cavalry comes the statement that however premissible was formerly the combination of the two duties of screening and reconnaissance, it is now absolutely incompatible with efficient work to perform this double function. Cavalry must be specially designated for the strategical reconnaissance and do nothing else. And again, other cavalry must take up the screening duties as a special function and do nothing else. Between the two there must be complete independence.

In a recent and important military work by General von Bernhardt of the German Army,* the author says:

"Modern armies indirectly influence reconnaissance in so far, too, owing to the long range and effective indirect fire of artillery, we must deploy for action sooner than formerly. It will be very exceptional for superior commanders to reconnoiter personally before such deployment. They are thus almost entirely dependent on the results of cavalry reconnaissance, not only for their operations but also for their dispositions for battle. This makes cavalry reconnaissance all the more valuable, but also calls for greater efficiency of that arm.

"The cavalry must precede the armies as far forward as possible to beat the hostile cavalry and push it back vigorously so as to allow our own patrols to approach rapidly the hostile column and discover their movements."

One interesting development of the two latest wars in facilitating the gaining of information was the creation of trained bodies of scouts. The British in South Africa found squadron

*War of Today.

and regimental scouts, specially selected for their natural intelligence, boldness, and eye for country, exceedingly useful and even indispensable. Similarly the Russians in Manchuria organized in each Siberian regiment, detachments of *okotniks* or volunteer scouts which did excellent service throughout the campaign.

It is worthy of note that although the long breathing spells which followed each Japanese victory in Manchuria have been generally attributed to the Japanese desire to perfect the *etape* or supply system up to the new advanced lines, as well as to recover from the shock of the preceding struggle, it is extremely probable that with insufficient cavalry available to reconnoiter the new positions of the Russian Army, much of this time was necessary to perfect the Japanese information of their adversaries and to plan their attack accordingly. As a matter of fact, much of the intelligence obtained by the Japanese army was through spies.

The initial contact of the strategic reconnoitering bodies of cavalry in advance of two great armies, may be likened to two great hostile fleets, whose initial clash has such an important bearing on the operations which follow. Command of the sea insures the steady advance of the land forces following, just as the crippling of the enemy's cavalry at the outbreak of war places the hostile commander at the terrible disadvantage of impaired vision and hearing. And the army commander who feels himself deficient in cavalry, will, like the Japanese, push his infantry supports well behind his cavalry, and avoid risking chance of losses in his mounted arm which he can ill afford.

SCREENING AND PROTECTIVE DUTIES.

As has already been said, the screening duties of cavalry are entirely separate from those pertaining to reconnaissance and include the giving of timely information of the enemy, furnishing topographical and statistical information of the country, and seizing important points in advance of the main force and holding them until the latter arrives.

If there is sufficient cavalry available for the purpose the screening duties will be performed by bodies of cavalry specially

designated, and marching from one-half to one days' march in advance of the corps or division they are protecting. But if there be insufficient cavalry for this duty, it must be performed by the "divisional cavalry," which in our Field Service Regulations consists of one regiment for each division.

Modern battle conditions impose upon the protective or screening cavalry the same formidable difficulties which have been discussed under reconnaissance. Their duties are such as to require great dispersion of units, and when the front is not covered by independent cavalry the screening force must oftentimes bear the brunt of fighting against infantry and field artillery, as well as hostile cavalry.

It should be impressed on the minds of all officers, whether of the mounted arm or not, that the screening duties of cavalry under modern conditions of warfare, are more arduous than ever before. Troopers are in the saddle for long periods at a time; all the usual routine arrangements for watering, feeding, and grooming the horses are liable to be upset; and a large proportion of the men are often detached for unnecessary orderly, patrol, and outpost duty. Consequently the day duties of protective cavalry should always be lightened as far as consistent with the proper performance of their task, and as few horses and horsemen employed on night work as possible.

It should be recalled that in the earlier period of the Civil War, the cavalry on both sides was made more or less ineffective by excessive outpost duty which could have been better performed by infantry, conserving for the mounted troops the mobility which renders them most useful to the army commander.

Under modern conditions, the commander who keeps his cavalry continually on night as well as day duty, will soon have no cavalry worth the name.

CAVALRY ON THE BATTLEFIELD.

As has already been said, collision of two powerful armies will usually see a fierce cavalry fight preceding the struggle proper, in which each side attempts to cripple or destroy the opponent's "eyes and ears."

Following this cavalry fight, the weaker cavalry will usually be held well in hand with infantry, machine gun, or artillery support; while the victorious cavalry, may according to two schools of thought, be either detached on a special mission against the enemy's flanks or rear, or be held in hand for the psychological moment when the interposition of the cavalry may turn the tide of battle or reap the fruits of victory through pursuit.

Eminent tacticians there are, who now consider the sphere of cavalry on the battlefield to be so far contracted as to be almost absolutely *nil*. While there is little doubt that modern munitions of war have greatly curtailed the activity of mounted troops on the battlefield, it would seem that there will still be opportunities for the cavalry to intervene, especially in dismounted action. Therefore the cavalry commander who is expected to coöperate must be in close touch at all times with the army commander, and stand ready to contribute to the success of his plans, even though it means heavy losses. Thus, the cavalry will often be able to take part in the preliminary advance-guard action of the infantry; to give timely warning of the great enveloping movements which are so largely utilized in modern battle tactics; to interpose between the enemy and our own enveloping movement around the hostile army's flank; and finally by concealing the horses, to deceive the enemy into believing themselves opposed by infantry, and thus cause them oftentimes to make an unnecessary and costly deployment.

But the great mass of cavalry during a battle, will doubtless most often occupy a "*position in readiness*," where the supreme commander may utilize their quality of mobility at the psychological moment. The tremendous length of ordinary lines of battle may even give opportunity to this reserve force of penetrating the enemy's front, especially if the element of surprise or demoralization contributes.

That the great mass of cavalry should ordinarily be kept well in hand preceding and during a great battle, was exemplified at the battle of Chancellorsville, where Hooker sent Stoneman with the cavalry on a raid towards the city of Richmond, thus depriving the Army of the Potomac of a reconnoitering and screening force, when "Stonewall" Jackson made his celebrated

turning movement around the Federal right flank resulting in the well-known panic which seized a portion of the Federal army.

On the other hand, the detachment of General Jeb Stuart's splendid cavalry force preceding the battle of Gettysburg, on a raid in rear of the Federal army, deprived General Lee of his information troops, and left him in comparative ignorance of the dispositions and intentions of the Federal commander.

AFTER THE BATTLE.

Should the battle result in victory for our arms, the cavalry will be needed to cooperate in pressing the defeated troops, the infantry and field artillery in direct pursuit, the cavalry by the flanks.

A keen British observer of the war in Manchuria has stated that if General French, with 10,000 British cavalry had been attached to the Japanese army at the battles of Mukden or Liaoyang, there would have been no Russian army in Manchuria to sue for terms of peace.

Should the main battle result in defeat for our arms, the cavalry must be prepared to guard the flanks against enveloping movements, and in case of retreat by our main force, to interpose between the pursuers and pursued and even to counter attack in order to minimize the losses and demoralization which nearly always follow a decisive defeat. Newspaper reports from the Balkans credit the only success of the Turkish arms to a counter-attack of the Turkish cavalry which succeeded in surprising the pursuing Bulgars, reckless and over confident in the high-tide of victory, only to be themselves overwhelmed by the fire of artillery and machine guns.

AEROPLANES.

So much has been said and written in regard to aeroplanes, that a brief discussion of these air scouts in their relation to cavalry, will not come amiss.

That the aeroplane, when developed, will be a very powerful aid to reconnaissance, goes without saying. But that it will replace cavalry, or will materially affect the value of cavalry is such an absurdity as to hardly merit consideration. As a

matter of fact, it will facilitate cavalry reconnaissance, and we can expect to see cavalry corps, divisions, and even separate brigades, equipped with their own aeroplanes, thus adding tremendously to both the reconnoitering and combat value of the mounted arm.

At the present time, the aeroplane is greatly handicapped by conditions of wind and weather, which improvements in its construction must overcome before it can be truly indispensable to the army commander. It seems probable, too, that in the mere *peace* trials of this wonderful auxiliary device, too much value has been put upon the ability of the aeroplane operator to observe and report upon the dispositions of hostile forces. It has been the writer's conclusion that unless an aeroplane approaches within 800 yards of troops, the folds of the ground vegetation, smoke, fog, and other local conditions make it most difficult to accurately observe hostile troops. On the other hand, any aeroplane which approaches within 800 or even 1200 yards of rifle or shrapnel fire, is quite likely to be put out of action. The use of the aeroplane at maneuvers, unattended by the actual use of bullets has, it is believed, led to an exaggerated estimate of the value of the machine as an air-scout.

While the aeroplane might cause considerable panic and demoralization by dropping high explosives among cavalry troops, its effect would be *entirely local*, and the loss of a dozen men and animals, however undesirable, would have little less effect than that produced by the burst of a modern high explosive shell. It must be remembered, too, that the capacity of these modern air-ships to carry high explosives is quite limited, and the difficulty of dropping these projectiles in the right spot is considerable, especially if the aeroplane operator be under fire, is operating in a high wind, or is opposed by hostile aeroplanes.

CAVALRY LEADERS.

After all is said with regard to the qualifications of the personnel of the cavalry and of their mounts, it is a truism to add that cavalry may be almost perfect in all other respects, and yet be absolutely useless unless properly led.

Of all the arms, it is the one which relies most on moral effect. The cavalry leader who can combine boldness with

caution, who possesses dash without recklessness, who has a working knowledge of all arms in addition to an expert knowledge of his own, whose physical make-up is such that he is able and willing to bear all extremes of fatigue, hunger, cold, heat, and other privations, who is willing to sink personal exaltation in contributing to the tactical success of other arms than his own, who has such an eye for topography as to grasp the possibilities of the terrain at a glance, and who possesses such instinctive, sub-conscious appreciation of the psychology of the battlefield as to seize the opportune moment for coöperation of the mounted arm—the cavalry leader, we say, may have all of these qualifications, and yet not prove the man whose magnetic temperament and lovable qualities impel men to follow and do his bidding, even to the extent of cheerfully laying down their lives in his service.

CONCLUSION.

It is no small satisfaction to us, children and grandchildren of the gallant men who, fifty years ago, participated in that gigantic struggle between these now United States, to note that the military tacticians of the Old Country, have at last come to recognize on the military operations of the Civil War, that the final development of the cavalry, both North and South, was along logical lines.

The glorious deeds of Stuart, Sheridan, Forrest, Wilson, Lee, Custer, Wheeler, Merritt, Hampton, Kilpatrick, Butler, Buford, Lomax, Grierson, and others, which for so many years were apparently little appreciated by other than the serious military student of this country, are at last securing the long-delayed recognition they deserved.

And should war with a foreign foe again call to the colors the youth of our country, may those of us who, feeling the fascination of the mounted arm, strive to follow in the footsteps of these brilliant soldiers, be able to hand down to our posterity the record for bravery, leadership, devotion, and self-sacrifice, which they have left indelibly emblazoned on the walls of the temple of fame.

THOUGHTS ON THE GOVERNMENT OF A REGIMENTAL CAVALRY POST.

BY BRIGADIER GENERAL JAMES PARKER, U. S. ARMY.

THE experience of a post commander is instructive, desirable and unique. He commands an independent body of troops. Like the chief of an army he has under his command line troops, a supply department, a medical department, an engineer department, an ordnance department, a signal department, a territorial district, a cantonment like a small city, with all its shops, storehouses, repair shops, streets, water supply, etc. He is invested with much responsibility and much discretion.

While he is limited by the Regulations, he can accomplish much more than they contemplate. Further, it depends on the post commander whether there is secured efficacy in the training of horses and men, in discipline, in neatness, in contentment. These things depend upon him more than on troop commanders or on squadron commanders or regimental commanders or brigade commanders.

Formerly, all officers above the grade of captain of the line were likely during their service to obtain more or less of the training which comes to a post commander. Now, with larger posts it is a more infrequent experience.

Without detailing all the duties of a post commander, I propose to mention a few things which in my opinion are of advantage in commanding a post.

Have officers' call once per day. At this call officers assemble and get their mail and orders. The post commander should always spend a few minutes in explaining printed orders, making criticisms, etc. In this way the junior officers understand the desires of the commander and team work will be produced.

Make things competitive as far as possible. Have once a month competitive inspection of quarters, made by the commanding officer; also of stables, also of grooming and equipment at monthly mounted inspection; also of individual horse training and drill of troops once per year; also in the number of men turned out for drills. Only by competition can we produce zeal.

Insist on neatness of officers' uniforms, of men's uniforms when about the post, at drill, when in town. Require the blue uniform to be worn as soon as work is finished, at parades, at guard mount. The service uniform is suited for work, only.

Look after your regimental pride, your *esprit de corps*.

It depends upon excellence in the conduct of men, neatness of clothing, preëminence in drill and discipline, and appearance of horses.

It can be greatly fostered by superiority in football, baseball, polo, etc.

Do not imagine that inspections, parades, reviews, are unimportant. When well conducted they add to the pride of the regiment.

With two formal parades per week the dress uniforms are kept in good order. The spectacle attracts admirers. Every soldier feels that he is the especial object of attention. He learns as a consequence some of the pomp and circumstance, as well as the drudgery, of war.

Reviews are also a test of discipline, steadiness and precision of drill. In this connection it will be found that the handsomest review of a regiment is in line of platoon columns, four platoons deep. For the march past the regiment should move in double rank column of platoons, and after passing the reviewing officer at a walk and trot, to charge past by successive squadrons.

Encourage civilians, conventions, visiting delegations, etc., to inspect your command and your post.

Included in these conventions are men of importance in their community, who make public opinion, and their approval will be of value to the army and enhance the pride of the soldiers of your command.

Work for the contentment and pleasure of your men and officers. On the enlisted man's contentment largely depends his discipline. Not only should the commanding officer look after his sports, such as baseball, football, polo, etc., but he should see that a large portion of the revenue of the post exchange is employed for the soldier's amusement.

The ration, as supplied by the Government, is, when properly cooked, sufficient. Big dividends and big company funds are unnecessary. The post exchange is a coöperative store for the benefit of the soldier, and, like other coöperative stores, it should be run less for a profit than for the opportunity to purchase cheaply. What profits there are should be used mainly in making the post exchange perform its additional function of the soldier's club, and also in helping along sports and evening entertainments. A large proportion of the men can be kept at home in the post three of four days in the week by investing the profits of the post exchange in a free moving picture show, which, combined with music from the band, boxing contests, etc., form a most popular entertainemnt.

The post commander should also encourage the formation of men's social dancing clubs. A dance to be had once a week.

The chaplain, by taking charge of such amusements for enlisted men and seeing that they are conducted in an orderly and systematic fashion, can be of great value to the regiment.

Another cause of contentment in a post is a married enlisted men's line of quarters. It often happens that the commanding officer, by making proper concessions, can greatly aid in the construction of quarters in the post for the wives of married soldiers.

Soldiers will marry, and when they are married it is better their wives should live within the post than at a distance. There thus results a social circle among the soldiers which gives them something to think about and brings them into contact with good women.

In the same way it is necessary that the commanding officer take a leading part in the social affairs of the officers and their ladies. To make a contented garrison he should favor them by all means in his power, organizing frequent hops, dances, and social gatherings. These things bring the officers

together—bring about a spirit of fellowship—and even serve as places where official matters may be discussed. Officers should be informed that it is their duty to attend them. The commanding officer should, if necessary, use his authority to encourage these events. They should not be left wholly to the will of an idolent committee of officers. It is a sad sight to see a post where the officers and women refuse to take part in post social functions.

In the same way the post commander should aid, and if necessary organize, sports for officers, such as polo, cross country riding, drag hunts, horse shows, horse racing, etc. It takes some little trouble to start these things, but when once started they are kept up by a feeling of regimental pride and add greatly to it.

Another form of military sport, which also adds to military efficiency, is the athletic meet. These meets should be had monthly. Thus a continued interest is kept up in them and training goes on all the time. As far as possible the events should be military in character or connected with equitation and horse training. Suitable events: fencing, polo, mounted wrestling, mounted tug of war, dismounting to fight on foot, grooming, packing, running at heads, tent pegging, etc. The exhibitions should be widely advertised so that numerous spectators will be attracted.

The value of troops for war depends more on training than any other attainment. Troops without training are worthless.

The necessity for extensive training grounds immediately adjacent to the post does not seem to be appreciated sufficiently in our service.

These should be large enough for the most extended problems of a regiment—for the attack of a position dismounted and for the numerous field exercises which illustrate the hazards of war.

The value of the exercise depends primarily upon the number of men present in ranks. Thus, if only thirty are present out of a total effective strength of sixty, the efficacy of that drill is, other things being equal, less than fifty per cent. of the possible.

The appearance and smartness of the trooper has much to do with his real efficiency.

A ten minutes' setting up exercise immediately after reveille not only improves the soldier's carriage, but adds materially to his health.

Neatness must be enforced. A soldier who is careless about his dress reflects upon his organization.

In the same manner the appearance and smartness of the horses reflects the efficiency of the organization.

Our cavalry is credited with having inferior horses. The fact is it is only their upkeep that is inferior.

The training of a horse properly conducted is a setting-up exercise.

Our horses are often not properly set up, not properly groomed, nor are their coats, manes and tails properly cared for. In camp they undergo the hardships of standing on the torrid sun without shelter.

All this should be corrected as far as practicable. If in camp, shelters from the sun should be improvised. In rain the horse should be protected.

As a rule each horse should be groomed for a short period before exercise, and for a half hour after exercise. The act of grooming should be strenuous—not carelessly done.

Our men need individual instruction in grooming. The mane, tail, forelocks and fetlocks should be kept trimmed to a uniform length in each troop. In the summer season in this climate the horses' coats, in the interest of appearance, comfort and health, should be clipped.

In order that a troop should be able to maneuver properly at high gaits, and then be fit for combat, the horses should be thoroughly responsive to hand and leg. This can only be accomplished by the annual training of every horse of the command on the riding track.

To properly train and handle a horse the use of the double bit is essential.

Practice in swimming horses, fording and jumping, is a necessary preliminary to active service.

No cavalry is fit for war unless it has thorough confidence

in the sword. The sword thrust reaches farther than the sword cut, and it is the point not the edge that kills.

"Fencing on horseback being generally impracticable," the first thrust that reaches usually ends the combat.

The principal thing is to impart to the trooper the determination to reach the adversary first, using the point.

With this in view troopers should be exercised in running at heads and dummy figures on the track. In practicing the thrust to the front the trooper should stretch as far as possible to reach the object, at the same time bending low, being thus partly sheltered by the horse's head. The gait should be the extended gallop. The use of the edge should be discouraged.

Drill evolutions mounted should be had at rapid gaits.

Particular attention should be paid to the practice of the charge against the imaginary, outlined, or represented enemy; the use of ground scouts and combat patrols; the employment of supports and enveloping wings.

When armed both the rifle and saber should always be carried.

The saber, as a rule, should always be carried drawn, in order to accustom to it the horse and rider.

In order to oppose the solid double rank formation of foreign armies, charging formations of more than one line or in mass should be at times practiced.

In order to quickly return the fire of an ambushed enemy, troops should be able to dismount and open fire in ten seconds or less. The led horses should be trained to lead to the rear in an orderly manner and at a gallop.

The attack of a position dismounted should be frequently practiced.

To determine the state of instruction of troops of cavalry in equitation and close order drill, a commander should make use of a competitive test.

The test should be as follows:

(a) On the riding track: Column of troopers at the walk, trot and gallop to determine the degree of excellence of horse equipments; of uniform of men; of grooming; of care of coat, mane and tail; biting and length of stirrup; position of trooper.

(b) To turn on forehand, to passage at walk and trot, to back, to change lead in the gallop, to pass from a halt to the several gaits, and vice-versa.

(c) Jumping hurdles 3 ft. high.

(d) Saber exercise, including running at heads, using point of the saber.

(e) Troop drill: Movements by fours at a walk and trot; the charge; dismount to fight on foot.

In this competitive test proficiency in each detail should be indicated by marks which should be published to the regiment by the commander.

In like manner competitive tests should be arranged to determine the relative efficiency of troops and squadrons in the field exercises.

As to target practice, for which a competitive test has already been arranged by the War Department, it should if possible, be postponed until after the spring drilling of the troops has been conducted for several months.

In northern posts especially, if the target practice is had in the early spring and the drilling is postponed until after target practice, the troops are liable to go to maneuvers with their ranks full of men who can not ride and horses that cannot be controlled.

It should not be forgotten by the authorities that the same rules as to training can not apply to cavalry as to infantry. In the cavalry we have to train the horse as well as the man.

Cavalry, as a rule, requires from three to five hours drill per day, the principal drill being mounted.

Cavalry recruits require eight weeks of drill six days per week, including three or four hours per day mounted, and two hours dismounted. The recruit is anxious to learn the duties of a soldier and will work willingly if his interest is kept up.

The former system of placing a raw recruit on a barebacked horse and hazing him until he fell off was barbarous, made him afraid of his horse, and often ruined him as a rider. The recruit should drill, from the first, in the saddle. He should be worked hard but not allowed to fall. He should be protected from unauthorized interference by other soldiers.

At West Point it requires 125 hours training to ride fairly. The enlisted recruit gets about the same experience in eight weeks.

READINESS FOR FIELD SERVICE.

The troops of our army should always be ready to leave their stations at a moment's notice for field service beyond the border or within the limits of the United States, or for a change of station. In either case all property belonging in the post should be turned into the quartermaster, and all property which goes with the troops should be packed in boxes and crates, listed, and either taken with the troops or left behind for future shipment. Experience has shown that this can be accomplished within two hours—the troops fully equipped and prepared for field service, being ready to entrain. But to bring this about, troops should be provided with the necessary boxes and crates, and should be trained in preparation for the field.

The property that is stationary in the post and the property that is removable should be borne on distinctive memorandum receipts so that the latter can be transferred to the quartermaster of the moving column without verification.

There should be from time to time a field preparation drill in the garrison to secure these results.

GUARD, FATIGUE AND PRISONERS.

To secure the best results from your guard have the officer of the day make his headquarters at the guardhouse. He thus spends his time supervising the guard duty instead of playing cards at the club, and he is always where he can be found.

In order to keep the men from being confined in the guardhouse for trivial offenses and thus increase the strength for daily drill let the summary court give the offender "*so many hours of labor under charge of the guard*" instead of imprisonment. Let the man so sentenced do his drill in the morning and do four hours hard labor each afternoon, nominally in charge of the guard, but actually like a man on fatigue, preferably doing task work.

The habitual absentee from reveille or taps who wants to see his girl and has plenty of money from home with which to pay fines is cured best by this treatment. It brings no more disgrace than a cadet's extra at West Point, but it deters from the commission and repetition of the offense. By avoiding

imprisonment it preserves the soldier from contact with jail birds.

Each post should have, in addition to fire alarm drill, an escaped prisoner alarm drill.

It is possible on the alarm of the escape of a prisoner, to rush out a portion of the command and so picket all the roads surrounding a certain area that the fugitive will be unable to escape from it and can be searched for at leisure.

While it is undesirable to have in the guardhouse short term prisoners from your own command, it is very desirable to have forty or fifty long term prisoners or convicts to use in doing the necessary fatigue work of the post, loading and unloading cars, sawing wood, delivering supplies, improving roads and grounds, and doing shop work for the quartermaster, all of which work has to be done but is irksome labor to the soldier in ranks.

To accomplish this the guardhouse should be a small military prison.

Part of the prisoners used as trusties need not be guarded when at work, the remainder to be in charge of a prison guard, detailed from month to month, made up of old reliable soldiers who are excused from all other duties. To reduce the number of sentries over prisoners, a bull pen should be constructed where all prisoners sawing wood, painting, doing repair work, etc., can be confined. Thus two sentries can take care of twenty or more prisoners.

The guardhouse should contain a mess-room and kitchen.

The ordinary guard duty of the post, the protection of grounds and buildings, can then be performed by a few mounted sentinels, the fewer the better, remembering, however, that guard duty is good preliminary instruction for service of security in war.

DISTRIBUTION OF DUTIES.

In general it may be said that line duties are the most important, and that an excess of staff officers injures a command. With a regimental post a quartermaster needs but one assistant, and that assistant might be able at the same time to attend to the post exchange. To relieve an officer of all other

duties to run a general merchandise store like the post exchange was not contemplated by our legislators.

While a commanding officer should keep a sharp lookout for details, a sense of discretion and responsibility should be felt by all subordinates. As far as possible they should be allowed to work a thing out in their own way. The duties of squadron commanders should be fixed by order. A squadron commander should be an administrative as well as a tactical officer. He should have control of the police of his squadron of the grooming, stables, and care of equipment. He should have a certain supervision over reports and returns. He should supervise the theoretical training of the non-commissioned officers, etc. In war he is often an independent commander. In peace his responsibility should be clearly fixed by regulations. His time should be fully occupied by his duties.

The duties of squadron commanders are so important that when a major is permanently absent the senior captain in the squadron should be placed on special duty as acting major of the squadron. In this way he will be relieved from troop duty, have more time for his new functions, and be an unprejudiced commander. There is no good reason why a captain should not be placed on special duty as acting major when he can be placed on special duty as police officer, post exchange officer, etc.

THE CARE OF PROPERTY.

The commander of a post has it in his power, by looking after property, to greatly decrease the expenses of the military establishment. He should frequently examine into the care that is taken of grain and hay, with a view to stopping the pilfering and preventing the thefts which are likely to occur at all large posts.

In the matter of inspection and condemnation of horses and mules it should be remembered that the great expense of these animals lies in their forage—this costing from \$10 to \$12 a month.

If a horse or mule is not fit for service he should be condemned and sold at once. If carefully prepared for the sale so that he presents a sleek appearance he will fetch a large price.

To preserve wooden buildings paint should be used liberally both inside and outside.

In connection with competitive inspections troop commanders will be glad to keep the inside of their barrack rooms freshly painted and the floors waxed if the proper materials are furnished them. Expenditure of plenty of paint is seldom a waste.

It is necessary for the Commanding Officer to combat the tendency to present for condemnation articles which though worn are fit for use or can be repaired. There are great numbers of articles in service which could be renovated by using parts of one article to repair another. To do this requires a special arrangement and a repair shop and a certain expenditure of funds to effect such repairs as can not be accomplished with the usual tools, materials, and employees. The establishment of a repair shop at posts and a record of economies accomplished in this manner will do much to lessen the cost of our military establishment.

The Post Commander should spend a minimum of his time in his office and a maximum of his time in the open watching the work of his command. To accomplish this is often not easy under the present system, but it is believed it could be facilitated by appointing the next senior officer "Assistant Post Commander" with power to perform certain functions, sign certain papers, etc.

For accomplishing the best results in training it is believed the regimental post has the advantage. If, however, troops are concentrated by brigades or divisions, things should be so arranged that the section occupied by each regiment should constitute a sub-post, the regimental commander having control, subject to the supervision of the brigade commander, over his own guard, fatigue, his own supply departments, his own guardhouse and his own transportation. Not only will this make each regiment more efficient, but it will also give the regimental commander and his staff experience which would be indispensable in case of war. To take from subordinate commanders responsibility in time of peace makes them helpless in time of emergency.

A TRIP TO PORT ARTHUR.*

BY CAPTAIN FRANCES LE J. PARKER, TWELFTH CAVALRY.

NO army officer who visits the Orient for duty or pleasure should fail to see Port Arthur. Its battlefields will be found to present, not only the best known example of modern fortress warfare, but, in addition endless interesting phases of hasty field fortifications and of the infantry and field artillery combats of which these hurriedly constructed lines were the scene. Port Arthur will be found deeply interesting to any officer who wishes to study his profession in the best of all schools—that founded on the actual experience of war as shown by concrete cases. The average line officer, no less than the engineer and coast artilleryman, will find that a trip to the famous fortress will well repay the time and expense involved. In this connection, it should be borne in mind that Port Arthur when war was begun, and even when the siege was actively entered upon months later, was far from a finished fortress; and that many of the lines connecting the main defensive works, as well as some of the latter that were the scenes of the fiercest struggles of the siege, were in reality not permanent fortifications but, in their essence, hasty field intrenchments.

The writer when desiring to visit Port Arthur in 1912, found considerable difficulty in getting definite information as to the details of available routes, etc. In the hope that they may save some fellow-officer time and trouble, the following notes as to railroad and steamer routes are included here.

To the officer approaching the Orient via Siberia, Port Arthur is apt to be almost directly in his path. The Chinese Eastern Ry. (under Russian management) turns south from the Moscow-Vladivostok line at Harbin and connects at Changchun

*The notes for this article were made by the writer during a trip to Port Arthur and vicinity in September, 1912. The schedules, etc., quoted were those in force at that time.

with the South Manchuria Ry., whose main line extends southward through Mukden to the main southern terminus at Dairen (Dalny). An extension of this road leaves the main line at a little way station called Tafangshen and goes to Port Arthur (Japanese name "Ryojun"). At Dairen the railroad company's fast steamers connect with the trains to and from Harbin to Chefoo, Weihaiwei, Shanghai, Nagasaki, Moji, Chemulpo, etc. Many of the boats are small and, on a few, special arrangements have to be made for European food. There are, however, some very good boats in this service, such as: the Hamburg-American Line's steamers connecting Dairen with Tientsin, Chefoo, make the fast Trans-Siberian service connecting Shanghai with Europe.

At Mukden the South Manchuria Ry. connects with the Chinese Government Railways leading southwestward to Tientsin, whence rail connections may be had with Peking and the Yangtse Valley (Hankow, Nanking and Shanghai). From Mukden also a branch of the South Manchuria Ry. turns south-eastward to Antung on the Yalu River (the boundry between Manchuria and Korea) where it connects with the Chosen (Korean) Ry., leading through Seoul to Fusan. Through trains run from Changchun to Dairen, Mukden to Peking (via Tientsin) and Mukden to Fusan. The last named, connecting at Fusan with steamers for Shimonoseki and Kobe, constitutes a link in one of the fast Trans-Siberian services between Japan and Europe (the others being via Dairen and Vladivostok, respectively).

Whether going to China, Japan or Manila, therefore, the traveler across Siberia to the Orient will pass conveniently near to Port Arthur. It should be stated that (unless changed since 1912) there are no through trains from Mukden to Port Arthur, the latter being reached by local trains from Dairen, running at convenient intervals during the day and evening. As Tafangshen, the station where these local trains leave the main line and turn south to Port Arthur is merely a way-station, it will be found, in practice, always better to make the trip from Mukden to Port Arthur via Dairen. The station at the latter place is within a few minutes walk or ricksha ride

from the Yamato Hotel, where good rooms and meals can be had and any wait between trains be comfortably spent.

The traveler from Manila and other points south of Port Arthur will usually approach that place by sea, though, as already indicated above, the trip may be made by rail (via Mukden) from Korean points and the direction of Tientsin. The port of Port Arthur was opened by the Japanese to foreign commerce in 1910; but practically all steamer passenger traffic for Port Arthur is handled through Dairen, the main commercial port of the Liaotung Peninsula and thence by rail. As a matter of practice, therefore, whether approaching Port Arthur by land or sea the route will ordinarily be via Dairen and thence by train to Port Arthur.

Steamer lines connect Dairen with practically every port on the China coast, Korea and Japan—for example: Newchwang, Chinwantao, Tienstin, Tsingtau and Shanghai; the steamers of the South Manchuria Railway Company on the direct Shanghai-Dairen service, and the boats of the Osaka Shoshen Kaisha's Dairen-Moji-Kobe service.

The principal connections of the South Manchuria Railway are, as already indicated, with the Chinese Government Railways at Mukden, with the Chinese Eastern Railways at Changchun, and with the Chosen (Korean) Railway at Antung on the Yalu River. The Chinese Government Railways include the Peking-Tienstin-Mukden route. Army officers can secure special rates on this line. If time permits, application should be made to the U. S. Army Headquarters at Tienstin for a warrant to present when asking for rates, but identification to the conductor on the train will frequently suffice. The Chinese Eastern Railway connects with the Siberian Railway at Harbin; both are under Russian management. The Chosen Railway runs from Antung via Seoul to Fusan, where it connects by steamer (ten hours trip) with Shimonoseki and the Japanese railroad and steamer services of that port. It has branches to several small ports on the south and west coast of Korea; among the number being Chemulpo. The South Manchuria and Chosen railways are under Japanese management. So far as known, they grant no rates to foreign army officers as a

class. It is understood, however, that rates to certain British officers have been granted upon application.

The Chinese Government Railway, the South Manchuria Railway and the Chosen Railway, each publishes a very complete pamphlet with schedules, fares on regular and special trains, the principal rail and steamer connections, railroad maps and similar information. It will be found that the Japanese have changed the names by which many of the places on the lines have heretofore been known to Europeans and Americans. The cases of Dalny (Dairen) and Port Arthur (Ryojun) have already been mentioned. Other important instances are:

Name formerly known by:	Present Japanese Name:
Seoul	Keijo (Railroad stations are Seidaimon and Nandaimon).
Chemulpo	Jinsen.
Mukden	Fengtien.

Army officers desiring to reach Port Arthur from Manila can do so by taking a transport to Nagasaki, proceeding thence by rail or boat to Shimonoseki, crossing from the latter place by boat to Fusan (ten hours trip) and going by rail via Seoul and Antung to Mukden and Dairen. This is a somewhat round-about way in distance and the rail trip is rather expensive. A first-class ticket, exclusive of meals, sleeping berth, and extra fees for express train, costs fifty-four yen fifty-five sen (y54.55) from Fusan to Dairen. Second-class railway travel is usually quite comfortable enough in the day time on the Korean Railway but this is not the case, as a rule, on the South Manchurian Railway.

The value of the Japanese yen, like that of the Chinese dollar, is about the same as the Philippine peso. The variations in value are made the excuse for exorbitant exchange charges.

Instead of going to Fusan, and thence by rail, connections can frequently be made at Nagasaki or Moji with a steamer for Dairen. If made this way, the trip will be much less expensive. The better boats of the Osaka Shoshen Kaisha leave Moji every Tuesday and Friday, arriving at Dairen on Thursday and Sun-

day, respectively. The first-class fare on these steamers is thirty-six (36) yen. The smaller boats stop by Chemulpo en route to Dairen. The free baggage allowance for first-class passengers on the South Manchuria and Korean railways is about one hundred and thirty-three (133) pounds; the second-class allowance, eighty (80) pounds.

There is a fast weekly service by boat (South Manchuria Railway Line Steamers) direct from Shanghai to Dairen and vice versa; and steamer connections from Tsingtau, Chefoo and Tientsin may be had either direct to Dairen or via intermediate ports.

From Tientsin, Dairen may be reached by rail, via Mukden in about two days or by steamer in from twenty-four to forty-eight hours. The regular first-class railway fare, exclusive of extra charges for express trains, sleeping berth, and meals, is about forty (40) pesos from Tientsin to Dairen. This charge, however, is subject to a reduction of about ten (10) to fifteen (15) pesos due to special rates allowed army officers on the Chinese Government Railway. The steamer fares from Tientsin to Dairen vary from about fifteen (15) pesos on the small Japanese boats to thirty-five (35) pesos on the very good steamers of the Hamburg-American Line.

While American troops remain in China officers will probably continue to have opportunities to go from Manila to Tientsin or vice versa by army transport.

In connection with the railway trip from Fusan or Chemulpo to Mukden, a stop of a day or two at Seoul will be found interesting; and by taking two trains on successive days between Seoul and Mukden, spending a night at New Wiju on the Yalu River, the entire trip between Seoul and Mukden may be comfortably made in daylight. New Wiju where the railroad, crosses the Yalu, is opposite Antung, and some miles below where the principal fighting took place at the crossing of the Yalu in 1904. There is a good hotel at the railroad station at New Wiju.

In traveling from Tienstin to Mukden or vice versa an interesting stop between trains can be made at Shanhaikwan, where the railroad passes over the great wall of China. A comfortable hotel will be found there.

To study the Mukden battlefield would require, due to its extent and special local conditions, advance arrangements to be made for guides, mounts, etc.; and it is questionable whether such arrangements could be satisfactorily made without official Japanese assistance. (Mukden, while nominally in China, is practically controlled by the Japanese). As a place of general interest, Mukden is well worth a day's stop. Application should be made *in advance* to the United States Consul for permission to visit the Palace there. Liao Yang is passed between Mukden and Port Arthur. Some of the works there are visible from the trains; but, for a real study of the field, conditions will be found somewhat similar to those referred to above as obtaining at Mukden.

At Seoul, Mukden, Dairen and Port Arthur very good hotels will be found. Rooms and meals are usually charged for separately. The aggregate charge ordinarily amounts to from six (6) to ten (10) pesos a day. Frequent statements to contrary notwithstanding, it is not believed that much help will be had from guides at Port Arthur, whether furnished from the hotels or in the form of Japanese officers. Very little English seems to be spoken at Port Arthur and the type of information extended to visitors is apt to be in connection with the ordinary features of the siege, such as would interest a tourist, rather than in connection with the more technical features which an army officer would want to investigate. The drivers of the hotel carriages usually know the principal forts by name.

In connection with books on Port Arthur. "The Influence of the Siege of Port Arthur upon the Construction of Modern Fortresses" by von Schwartz (translation published by the War Department) is highly recommended both for previous study and to carry on the ground. It will be found to contain, in addition to a number of interesting discussions of the special points of the siege, a statement of the original plan of the fortress, of the modifications that were contemplated prior to the outbreak of the war, of the actual condition of the fortress when war began, of the work done between the declaration of war and the beginning of the siege, and of the effect of the bombardment, etc., upon the principal works. Its detailed listing of the works on the line can be easily followed, including the

various minor salients and other features, so that these can be accurately identified on the ground—a thing a great many of the works on Port Arthur do not permit. Another interesting work is "The Truth About Port Arthur." (There is a different book called "The Truth About the War.")

In addition to the above, and to the well-known works on the siege, official reports, etc., there may be mentioned: the pamphlet, "Descriptive and Historical Sketch of Port Arthur," distributed by the Yamato Hotel at Port Arthur; also a booklet, "Port Arthur, Its Past, Present, and Future," by General Sakuma of the Japanese Army (book obtainable at books store in Old Town at Port Arthur.)

Officers may find themselves in China without books to which they desire access will usually find a good supply of Port Arthur literature at Kelly & Walsh's book stores in Shanghai and Tientsin.

The details of visiting the lines of work depend, of course, upon the nature of the examination contemplated. The position of the available roads suited to the use of vehicles, as well as the actual location of the works, at present divide the latter, for the purpose of visits to them, into two general divisions, namely: the works on the east side of the break in the hills made by the valley of the Lunhe River* (through whose valley the railroad enters Port Arthur); and the works on the west side of that valley. In September, 1912, there were open to the public, in each of these general divisions, all parts of the lines that had played an important part in the actual operations of either the Russians or the Japanese during the siege. In the eastern of these two sections, the part so opened extended from and including Battery A (Pai-Yin-Shan, North), in the north-eastern part of the former Russian lines, westward, via: Redoubt No. 2 (Tung-Chi-Kwan-Shan, southeast); Battery B (Tung-Chi-Kwan-Shan, east); Kuropatkin Lunette (Battery Q); Fort No. II (Tung-Chi-Kwan-Shan, north, or north Fort); Eagle Nest, also called Wantai and Bodai; Caponier No. 2 (Battery P); Fortification No. 1 (east Panlung-Shan); Fortifica-

*For this and following references to lines see maps in War Department publication "Influence of Siege of Port Arthur, etc" or in any standard work on the siege.

tion No. 2 (west Panlung-Shan); Caponier No. 3 (Battery G); Fort No. III (Er-Lung-Shan); Redoubt No. 3 (Sung-Shu-Shan); and the Mound Battery, to the railroad.

There were additional fortifications, emplacements, etc., in rear of the works named above and in the intervals between them; while, in front of the main line, there were advanced positions on Hsiao-Kushan, Ta-Kushan, at the Aqueduct Redoubt, and at the Temple Lunettes (Idol Forts, Shuishihying Redoubts). West of the railroad the Russian line held during most of the siege consisted (from east to west), first, of a group of works the most important of which was Fort No. IV (Itzushan), while more to the rear were Battery C and Battery D (Hsiao-Antzushan), and Redoubt No. 4 (Ta-Antzushan). West of Itzushan came trenches, etc., closing the interval to Flat Hill (Akasakayama); then, as the line turned southward, came 203 Meter Hill and some minor works connecting the latter with Fort No. V (Tai-Yang-Kou, north) and its neighbor just to the south, Battery E (Tai-Yang-Kou, south). At the beginning of the siege the Russian advanced position in the western section extended considerably further to the front than the line just indicated and included rather hasty works on 174-Meter Hill and Namakoyama; also similar works on some of the points of the ridge still further to the north.

All of the works, approaches, etc., in the eastern and western sections designated above, including both the Russian defensive works and the corresponding Japanese lines opposite, were open to visits by the general public in September, 1912. The vicinity of Battery A, a group of forts near Itzushan and the Tai-Yan-Kou Forts had been only recently so opened. Access to many of the defenses, etc., outside of the above-described sections, including the coast defense batteries, was forbidden in 1912; but, as the sections that were opened included the sites of all of the more important operations of the siege, there was little reason to attempt to extend investigation beyond their limits, even were such extension permitted.

As already indicated, the interest involved in examining the ground at Port Arthur will be proportionate to the familiarity previously acquired with the main points of interest of the siege. For officers with considerable time to devote to the

subject in advance, and with access to the necessary books, it will add greatly to the interest and benefit of the trip if a condensed memorandum be prepared, and carried about when visiting the lines, showing for some of the principal works: dates and main incidents of the principal attacks on each with reasons for success or failure of the latter; the date of the final capture of the work; and the effect of such capture upon the neighboring works of the line. Specially important points for study of this character are thought to be: Fort No. II; East and West Pan-Lung-Shan; Fort No. III (Er-Lung-Shun); Redoubt No. 3 (Sung-Shu-Shan); Akasakayama; and 203 Meter Hill. In the absence of a more complete account of the siege, the necessary data for a very useful memoranda of the above type may be had from reference to, or extracts from, the War Department publication previously referred to and the pamphlet mentioned above as obtainable at the Yamato Hotel. Note especially in this latter publication: the table of "Dates of Occupation of The Forts." (page 17); the "Chronological Table" (pages 35 to 41); and the Appendix (pages 42 to 43), showing the Japanese, Russian, and Chinese names for many of the works. A similar convenient listing of the names will be found on one of the pages just preceding the subject-matter of the War Department publication already referred to. Individual officers, will of course, wish to devote themselves specially to different phases of the operations of the siege, such as; the general question as to the proper selection of the main line of defense and the general location and character of the principal works; the question of advanced positions and the extent to which they should have been fortified and held; the character of the interior line, or lines, of defense; details of the construction of the works and what the experience of the siege showed to be the advantages and defects thereof; the various assaults and the reasons for success or failure in each case; the existence of dead spaces about the works and the result to the defense; the details of the siege approaches and parallels; the question of covered communications; the use made of searchlights, field telephones, telegraphs, etc.; the obstacles employed and with what success. All of the above points, and others of a similar character, are briefly and clearly treated in

the War Department publication already referred to; and, while the entanglements and obstacles have been removed, and the details of the forts in many cases obliterated by bombardment, etc., still most of the features of the siege operations can be followed today on the ground without the least difficulty.

To reach from the hotel or railroad station points in the eastern section of the lines, there is a main road passing through Old Town and striking the main line of the Russian works just west of Battery A. This road then turns generally westward, continues along the line and in rear of the works as far as Fort Redoubt No. 3 (Sung-Shu-Shan) and then turns southward and follows the railroad back to the station, thus completing a circuit. The Aqueduct Redoubts and the Temple Lunettes may be reached by a road branching off from the one just described at a point in the valley west of Sung-Shu-Shan, and the foot of Itzushan may be reached by another rough road branching off to the westward. A second main road runs from the railroad station via the Hotel to 203-Meter Hill. From this also a branch turns off (northward) to the Itzushan Fort. There is a direct road from the New Town to Battery E (south Tai-Yang-Kou Fort) and vicinity; with this exception, points in the western section of the lines are ordinarily reached by side trips from the road to 203-Meter Hill. A vehicle can go from Sung-Shu-Shan to 203-Meter Hill only by making the long circuit via the railroad station.

Carriages for two people are to be had for fifty (50) sen an hour or five (5) yen per day. Rickshaws can also be had, but are not suitable for the longer trips. Most of the actual examination of the ground must be done on foot; and, as the journey is over broken ground covered by sharp rocks, good walking shoes are indispensable.

The weather in Port Arthur in late September or October is usually ideal for tramping over the ground.

Where time is short a good deal may be saved by taking luncheon from the hotel thus saving a return trip at noon. On the other hand, where there is no great hurry, it is thought that more pleasure and benefit can be had by using each morning for a long tramp over some part of the lines, returning to the hotel for a lunch and short rest at noon and spending the afternoon

in detailed examination of some special feature of the line which does not involve further hard walking—for example, inspecting in detail one or more of the big forts or the siege approaches immediately in front thereof.

It takes about three-fourths of an hour to drive from the hotel to the vicinity of Battery A; about one-half an hour to drive along the rear of the line from Battery A to Er-Lung-Shan and about the same time to drive from Er-Lung-Shan to the hotel. Roughly speaking, it will take from one and one-half to two hours to drive without stopping from the hotel around the rear of the forts of the east section and return to the hotel.

It takes from twenty to thirty minutes to drive from the hotel to the foot of 203-Meter Hill, about ten or fifteen minutes to drive from the hotel to South Tai-Yang-Kou Fort, and about the same time to drive from the hotel to the railroad station.

For use in Port Arthur, and also for general use in Manchuria as far north as Changehun and in Korea, Japanese money will be found the most useful.

Assuming that a *single day only* is available for Port Arthur it might be spent as follows:

The morning (8:30 A. M. to 1:00 or 1:30 P. M.), to be employed by driving, first, to the main Russian line near battery A, proceeding thence westward over the road in rear of the line, with a few moment's stop to walk over to the crest at each principal point, until the place is reached where the trail to the Eagle's Nest leaves the road. Here dismiss the carriage temporarily, with orders to go on by the road and wait your arrival at Fort No. III, (Er-Lung-Shan). Climb the Eagle's Nest for a good general view; then walk down to Fort No. II and continue along the general line of works to Er-Lung-Shan. After studying the last-named fort, drive over to Sung-Shu-Shan and, after completing your examination of that work and its vicinity, return to the hotel for lunch. In the afternoon make a trip to 203-Meter Hill and its immediate vicinity. Should there be any remaining daylight on your return, a drive up on Monument Hill is suggested.

For a two day's stay, it is suggested that the whole of the first day be spent on the eastern section, luncheon being taken

out in the carriage. The morning of the second day might well be spent at 203-Meter Hill and its vicinity, including Akasakayama, Namakoyana, and 174-Meter Hill. The afternoon of the second day might be spent in a trip to the Itzushan group and Tai-Yang-Kou group, or to some special forts of the eastern section; or be employed in a trip to Monument Hill and Old Town, including the Museum.

Where a stay of three days is contemplated, it is suggested that the first two days be utilized much as described for a two days' stay. This will insure a glimpse of the most interesting parts of the lines even should bad weather, or other unforeseen contingency, prevent satisfactory work on the last day. When a third day is actually available, it can be well utilized in visiting some of the advanced works, examining the Japanese lines on the opposite ridges or specializing on features such as the details of the permanent works, location and types of the temporary works in the intervals, or any other special features.

Once a vist passes from a mere sightseeing trip to a study of the lines, no difficulty will be experienced in finding endless points whose investigation will be interesting. The real trouble will be to pursue any one point to the end without being drawn off by curiosity as to the numberless trenches, etc., that are everywhere to be found—although the enterprising farmer is already making progress in obliterating some of the works on the more arable ground.

Most officers who may have more than two or three days to spend at Port Arthur will probably prefer, after they have acquired some familiarity with the ground, to work out their own scheme for going over the lines. For the benefit of any who may find them of use, some notes are appended below as to trips that the writer found very interesting. Field glasses should be carried and the best obtainable map (mounted on cloth). A Chinese boy to carry lunch, etc., may be found convenient.

1st. Drive out via Old Town to where the road strikes the main Russian line just west of Battery A (S.-E. Tung-Chi-Kuan-Shan). This point is near the one marked "Silver Hill Fort" on some of the maps. Have the carriage wait and walk over to the concrete work (Battery A), just to the east, from which a good view of all the east end of the land front

is to be had. From this point, work along the line to the west, locating each work, including those just in rear of the line. The part of the line between, and including, Fort No. II (North Fort) and Fort No. III (Erlungshan) and from the latter on to and including, Redoubt No. 3 ((Sungshushan, was the scene of much of the hardest fighting of the siege and will well repay very detailed study. Two of the four temporary works (E. and W. Panlungshan) on the main line between Forts No. II and III were captured in the first great assault in August, 1904, and successfully held to the end of the siege by the Japanese, who however, were not able to get the parapet (Chinese wall) just in rear of the works. Caponier No. 3, just to the east of Fort No. III, was taken in the October assault. An examination into why these points fell, and into how the Japanese were able to hold them, will prove well worth study. It will be noted that although Forts No. II and III and Redoubt No. 3 (really a fort) were the objects of numerous bloody assaults, each was finally taken, after many months of successful resistance, only as the result of typical siege operations, terminating in each case by securing gradual possession of the glacis and ditch and finally blowing up the front of the fort—this in spite of the uncompleted state of the forts, the general lack of preparedness of the Russians, and the very unskillful placing and use of the artillery of the defense. A day can be easily put in along this section (in which case lunch should be taken instead of returning to the hotel) or portions of the line may be taken on successive afternoons in connection with morning trips to other points. The carriage may be sent back to return at a certain hour to a specified point or may follow along the road just in rear of the works.

2d. Drive to South Tai-Yang-Kou Fort and direct the carriage to meet you at 203-Meter Hill or Itzushan Fort (via the road approaching the latter fort from the south) according to your plan for the day (see below).

From South Tai-Yang-Kou Fort a good view is to be had of the southwestern part of the line of defense thus helping to get a good conception of the general scheme of defense. Walk on over to North Tai-Yang-Kou Fort (which you will see a little to the north), stop here a few minutes to look about, and

then walk over towards the south end of 203-Meter Hill, following the communications leading to the smaller hill situated a little southeast of 203-Meter Hill; from here keep to the south (left) of 203-Meter Hill and cross a deep ravine to the most southerly of two or three little knolls west of the ravine; notice the approaches by which the Japanese reached these knolls and, turning toward 203-Meter Hill, walk over toward southwest corner of latter, noting the approaches; climb 203-Meter Hill from this direction, noticing the successive trenches as you ascend. On reaching the crest near the small monument at the southern summit of the hill, get your bearings and notice the Japanese trenches (dug after the capture of the position) on the east side of the hill; then continue along the crest to the north summit, where the larger monument stands. After identifying the surrounding hills (Akasakayama, Namakoyama, 174-Meter Hill, etc.), descend to the trail in the saddle just to the north of 203-Meter Hill and walk over to 174-Meter Hill. Notice particularly how 203-Meter Hill looks from this side, the original exposed road connecting it and 174-Meter Hill, and the latter covered communications via ravines and trenches. Having examined the trenches on 174-Meter Hill, and noticed the importance of the hill as a point in the line, turn eastward along its slopes and descend to the north end of Namakoyama. Climb this hill, noting the favorable point of attack at the northwest corner, and, having gained the crest, continue along it toward 203-Meter Hill until a trail is struck leading down to the ravine between Namakoyama and Akasakayama. Descend to the ravine and climb Akasakayama, noticing the various trenches on the sides of the hill, especially near the southwestern corner. The crest and eastern slopes of Akasakayama furnish most interesting samples of trenches, shelter for supports, covered communications, etc. From Akasakayama continue eastward along the works that cover the ridges leading toward the north front of Itzushan (plainly visible), including Long Ridge (Division Hill) and come out finally in the valley under Itzushan (on the west side of the fort). To reach the fort the steep ascent in front of it may be climbed or an easier, but longer route around to the west and south of the fort may be taken. The carriage can approach from the south (203-Meter Hill road)

to near Itzushan Fort. Examine Itzushan Fort and continue the examination, if desired, to the neighboring works on the hills nearby.

The above will be found a pretty good day's tramp, for the terrain is steep and very rough. It can be covered by hard walking between 8 A. M. and 1 or 2 P. M., but it is thought that much better results can be had by taking it in a whole day or two half days on separate days. Either can be readily done as the vicinity of Akasakayama (where the carriage could wait) is the natural place to make the division.

3d. Drive via Old Town and Battery A to as near the foot of Takushan as the carriage can approach (in 1912, a village a little southeast of the hill). Leave the carriage here with orders to go at once to North Fort and wait for you there (North Fort can be pointed out to the driver from knoll near village referred to). Climb Takushan, noting main Russian lines behind you to the south (including visible coast forts). On reaching the crest a splendid view of the terrain is to be had and an excellent opportunity to study the question of "advanced positions." When ready to descend, take a trail (steep) down the northwest face, noting as you go down the Russian trenches on the lower slopes and the Japanese approaches to them. Having reached the foot start off across country towards Eagle Nest (plainly visible) and continue on thus as far as the North Fort, noting the Japanese communications in the river valley and, later, the approaches and parallels to the North Fort. This will be a good morning's tramp. From the hotel to the foot of Takushan by carriage will take about $1\frac{1}{4}$ to $1\frac{1}{2}$ hours; a half hour more is ample for the climb, and the walk from the foot of Takushan to the North Fort will take from one to two hours according to the time spent following the trenches, etc., near the North Fort.

The afternoon of this or a subsequent day may profitably be spent on the siege works in front of, and along, the line North Fort—Erlungshan—Sungshushan. It is an easy walk from Erlungshan to Aqueduct Redoubt, at the north edge of an isolated patch of low pine forest.

4th. Drive out to the Temple Lunettes (there is a road just to the southwest of them and the Temple itself will readily be recognized.) Dismiss the carriage and direct it to meet you

at the foot of 203-Meter Hill at a fixed hour not less than three hours later. Having seen the Temple Lunettes, follow up a ridge leading in a northwesterly direction (north of Itzushan and 174-Meter Hill). Locate early 203-Meter Hill (easily found with your glass) and, guiding generally on it, pursue the examination of the advanced Russian trenches and later Japanese siege works as far to the north and west as you please, finally crossing over and joining your carriage at 203-Meter Hill. Some idea of the lines here may be gotten in three or four hours, or much more time can be put in at it, as desired. Don't get too far from 203-Meter Hill unless you want a stiff walk; the country is rough.

5th. To visit the Japanese gun emplacements, etc., on the ridges north of the eastern half of the main Russian line, a good plan is to take the 6:20 A. M. train to Lan-Tou station (arriving about 6:40). From here the crests of the Japanese works will be plainly visible on the neighboring hills. Make such a detour through them to the east, south, west and north as you find interesting, returning to Lan-Tou in time to catch the train to Port Arthur about 10 A. M., or a later train if preferred. It is thought that three hours here will suffice for an ordinary examination.

If the first train to Port Arthur is taken, arriving there at 10:30 A. M., the interval before noon may be conveniently utilized in a trip to the museum, Monument Hill, etc.

The above trips may be doubtless improved upon after considerable familiarity with local conditions is obtained. They were made by the writer substantially as indicated above, except that in No. 4 the carriage waited near the Temple Lunettes, involving a return to the starting point, and in No. 5 the trip from Lan-Tou to the Aqueduct Redoubt was made on foot. In each of these cases the suggested change is thought to be an improvement.

It should be borne in mind that in many cases the same position was held successively by the Russians and Japanese, thus accounting for two sets of trenches.

In connection with a trip to Port Arthur a visit may easily be made to the battlefield at Nanshan Hill, which will be found most interesting. The trenches, gun emplacements, etc., are

well preserved and may be easily followed. To reach Nanshan, a train can be had leaving Dairen at 7:20 A. M. and reaching the station (Chinchou—about $\frac{3}{4}$ miles from the battlefield) at 8:24 A. M. Under the schedules in force in September, 1912, no returning passenger train was available until 5:31 P. M., but a freight train, with caboose, passed at noon, arriving at Dairen at 1:30 P. M. This gave ample time to walk over the battlefield, the topography being very simple. If it should be desired to make a further study of the battle, as by examining the Japanese artillery positions, routes of approach and deployments, etc., it would be necessary to take a whole day and advisable, if possible, to arrange in advance for a pony. In this case luncheon should be taken from Port Arthur; Chinchou being merely a way station.

THE TENTATIVE CAVALRY DRILL REGULATIONS.

BY COLONEL JOHN C. GRESHAM, TENTH CAVALRY.

IN the tentative drill just tested near Winchester, Va., there is much that is good and so simple is the mechanism and few and easy the evolutions, that they can be mastered in a short time. With us this is important, for in case of war with a powerful enemy we should be compelled to train thousands of mounted men with the least delay possible. As the drill can be readily adapted to our present organization, I should be glad if many of its movements were adopted. The objectionable features of some of its evolutions will be noticed below.

Defects of graver character are found not in the mere evolutions but in the foundation of the system itself. Its basic ideas are leading, signaling and shock action which are made to overshadow all other considerations. While none could wish to dispute that, in themselves and in proper limits, leading, signaling and shock action are excellent, there are other things of equal or greater value that must be given due prominence or serious evils are sure to creep in.

A brief discussion may help to make this more clear.

LEADING.

Leading in the new drill means that all are held by leading strings, which in the platoon are in the hands of the lieutenant, in the squadron in those of the captain, and in the regiment in those of the colonel. Should one of these leave his post to supervise the working of his unit, he must hand the strings to a designated person till his return. But as this person can do nothing of himself, the leader is constrained to hasten back where alone signals can be seen. For this reason, he never leaves his post and forgoes all opportunity for properly instructing his men.

The strength of the binding cords depend on the closeness of attention given the leader by the led and throughout the regiment the eyes of each commissioned officer must, therefore, be constantly fixed on his immediate leader and must by an unremitting gaze catch all his signals. Think of this in the dust and confusion of combat.

In our present regulations, the instructor, wishing to teach the principles of leading, takes post in front of the center and commands, *Follow in Trace*; but, the lesson ended, he simply announces the guide and is free in mind and movement. Leading having received its share of his attention is dismissed and he proceeds to other matters no less important.

But in the new regulations this procedure is impossible. Here leading is all in all and its cords can never be cast away or broken asunder.

Should the leader venture away from his post, he is still in bonds and must hasten back to resume his role of leadership—or rather of leading; for between the two is a vast difference. The one is an act of flat routine, the other of strong command; the one bound, the other free; the one guides a unit at drill, the other fires hearts and unites them in heroic endeavor.

It would be hard to have too much leadership, but is easy to have too much leading.

In the schools of the platoon and squadron, which in this drill is the basis of efficiency, proper instruction is impossible because no commissioned and few non-commissioned officers can exercise supervision and, evolutions naturally easy and readily mastered are too often ragged and unsatisfactory. Of this there is much complaint and leaders declare with truth they can not be held responsible.

A few days ago a mistake occurred well illustrating the evil inherent in this obsession of leading, and when we reflect such errors are far more likely in the press and confusion of combat than in a tactical problem, the danger is more apparent. There appeared suddenly two represented enemies advancing on the regiment, one from the northeast, the other from the northwest. To meet the latter and smaller force one squadron was directed to fight on foot, while to meet the former, the other

three squadrons were ordered to charge. Of one of these, two platoons, misunderstanding the signal, also dismounted to fight on foot instead of going to charge. Not till he rallied his unit after the exercise did the leader discover the mistake and was much surprised to learn that only half his squadron had followed him.

Again, is there not a probability that constant gazing for signals from a leader and unremitting looking unto the hand of a master may gradually grow and finally, in course of time, become part of nature, so that their free spirit of enterprise, independence and initiative being impaired or destroyed, American soldiers may be Europeanized and turned into blocks like those of the rank and file of foreign armies? Shall our birthright, admired and coveted by all nations, be sold for a mess of pottage?

SIGNALING.

Signaling must always be used unless dust, fog, darkness or other causes make it impossible. The purpose is to avoid noise and confusion which all concede is most desirable and must be achieved by every feasible means. As in platoon drill, owing to the smallness of the unit, signals are easily seen, they should be used—not invariably but only frequently—whenever visible. If used invariably, it must follow that, as the leader is practically chained to his post, he must lose all facility for learning to handle his platoon at times when, owing to invisibility, signals can no longer be used. Even when clearly visible, therefore, much time should be devoted to instruction without signals so that the platoon might be efficient however dark, dusty or foggy it might be. In the drills at Winchester I have never seen a leader leave his post nor heard one give a command. This is a grave error to correct which the leader must be free in movement, must frequently practice prescribed commands, must often announce the guide and the men—especially the non-commissioned officers—properly using their eyes and confident a light touch toward the guide is all sufficient, must be trained to march as of old.

Moreover if signals be used invariably, the leader can acquire no facility in giving the commands and must either forget or even fail to memorize them. As a corollary, the men also

must remain ignorant of them. Since perforce, commands must be given if signals can not, such conditions are dangerous and must be avoided lest the platoon be unmanageable at times when signals may be invisible.

All these difficulties obtain to a much larger degree in the squadron and regiment, since the former is four and the latter twelve to twenty-four times the size of the platoon. In the regiment signaling can hardly be used at all either in column or line owing to the distance to remote units and it becomes necessary to employ the whistle to engage a sharper attention of unit leaders and prepare them for coming signals, which even then are often unseen. Imagine the difficulties on unfamiliar terrain and in the dust and confusion of battle.

In order that the squadron commanders as well as the colonel himself may be free and untrammelled, signals by the latter should be forbidden and his wishes communicated through intelligent messengers on picked horses. In the regiment simultaneity of execution can seldom be attained and it would be wise to acknowledge this condition and make it the controlling principle in the training. To this end all attempt to treat the regiment as if it were a platoon or squadron should be abandoned and squadron leaders be taught to execute the commands of the colonel the instant his messages are delivered. In this way alone can mistakes and confusion be avoided, speedy, orderly, accurate evolutions assured, and both in ployments and deployments, distant units be spared the fast disordered racing so disabling to men and horses. In this connection it should be remarked that the number of men and horses injured in the drills near Winchester has been uncommon.

"The word of command," says von Bernhardi, "should be limited to those units it can actually control—namely the squadron." With us this limit would be reached in the troop of 125 to 150 men. The Germans declare there is no guarantee that commands will be transmitted by signals. They seem to be right.

The same authority, von Bernhardi, says also that, "the use of bugle calls must be restricted to the utmost and permitted only in circumstances where impossibility of misunderstanding can arise." Squadron as well as regimental commanders, there-

fore, must be provided with a suitable staff for transmission of commands.

In the new drill signaling is the tool of leading and like it is much overdone.

SHOCK ACTION.

Shock action with its tool double rank is the third basic principle underlying the new system, which prescribes that "the normal formation is in line in double rank" and "the charge in line is the normal attack of cavalry." But single rank may be used "to mask a movement in rear;" "to attack a weak or disorderd enemy;" "to attack infantry or artillery under special circumstances;" "to diminish vulnerability under fire;" but "should never be used against compact cavalry."

It will be noticed that numerous important uses are prescribed for single rank and only one for double rank. Of the uses mentioned for the former, the last would seem of supreme importance in active operations, since cavalry is peculiarly susceptible to injury from fire. Why then should double instead of single rank be the normal formation?

The reason is that the new book makes shock action in double rank the leading, distinctive, characteristic of cavalry, compared with which all other rôles it may have to play are of minor importance. This idea would seem identical with that in vogue before the Civil War, but which in the strong light of its shifting tests was seen to be erroneous. So firm was the hold of the double rank on the men of that day, that our fathers, unable to shake it off, used it with few exceptions throughout that great struggle and refused to abandon it for several years later.

With shock action, however, the case was different and it was soon discovered, that while a well delivered charge had mysterious terrors and might be followed by consequences of tremendous import, it nevertheless found such rare opportunity as to lose for most part not indeed the high respect but the relative value theretofore conceded it. It was seen that cavalry trained and content to wait for such opportunities was reduced

to an almost negligible quantity and for over two years there was both rhyme and reason in the song:

"If you want a good time, jine the cavalry."

Not only have the lesson of the great war been accepted in the United States, but for many years they have been winning the approval of all but extremists in Europe.

Von Bernhardt declares: "I believe that only in exceptional cases will a purely cavalry combat take place. It will by no means always be a matter of choice whether we fight mounted or dismounted. Our opponent will compel us to use dismounted action by himself dismounting and seizing the rifle." "Cavalry will generally act dismounted, but small bodies may effect surprise by shock action." Thus predicts Lord Roberts, who speaking of our cavalry in the Civil War also declares that "its achievements were far more brilliant than those of the Germans of 1870."

While all believe the charge must be practiced daily and taught diligently so it may be effective if occasion offers, many feel that its relative value does not entitle it to the supreme but to a subordinate place and that the new system is illogical in making shock action the controlling factor in determining not only the training but also the very organization of the cavalry of today. The double rank having been rejected after the test of the Civil War, it is hoped that single rank may still remain the normal formation and that successive ranks with repeated blows may continue to be used for shock action.

If we set ourselves to thinking about a charge in double rank and try to picture the effects of accidents of ground; green mounts; green volunteers; running on heels of front rank horses; casualties from fire; smashing of front rank at contact; resulting smashing of rear rank; chaos in both; are we not disposed to shrink away and turn with hope to the order and cohesion of single ranks coming on in swift succession but far enough apart to escape at least all avoidable disasters.

Some weeks ago in a mere platoon drill at an extended gallop, a horse in the front rank went down and as the result seven horses and riders were knocked out of ranks. This was

at ordinary drill of the smallest unit in time of peace on smooth, familiar *terra'n*.

As stated near the beginning of this paper, there are several things in the mechanism of the new drill that seem objectionable. Some of these, such as squads, half squads, files, instead of fours, twos and troopers; restriction of movements by fours and their replacements by movements by platoon; enforced distinctions between the right and the left and between the front and the rear ranks in platoons; the impossibility of wheeling by squads mounted; all these would seem to impair the handy flexible maneuvering of cavalry.

Again paragraph 38 of the new book has the following: "In order to utilize fully the individual audacity, physical force, and skill of the more efficient men as example to the others, it is important that the boldest troopers mounting the best horses be not restrained." In the drills at Winchester, this idea does not seem to have worked well. It is, of course, contrary to the principles we have been taught as to mass. cohesion, speed of slowest horse, etc., and is also opposed to the teaching of von Bernhardt, who says that in the charge, "the utmost speed consistent with closely locked files" must be used.

I cannot help believing that our present organization is best suited to all the uses of cavalry including shock action itself and even if the latter, instead of rare, should find innumerable opportunities in the future, that still no change would be required.

It is very desirable that our troops should have more men—125 in all—but otherwise we can safely rest content.

Napoleon declared: "If I could put as many men in the cavalry as I desired, I would never be deterred from carrying regiments of 1200 men each forming four squadrons of 300 men each."

In achievements by shock action he doubtless had and still keeps the start of the world and will continue to bear the palm alone.

Though double rank may not be best for charging, it still has owing to its compactness great advantages in handling and maneuvering troops and should be retained as an important part of cavalry drill.

It seems, however, that the old regulations of some forty years ago are better than the new, in which formation of single rank from double and vice versa is crude and rather disordered.

In the old drill the commands were: 1. *Center forward*, 2. *Fours left and right*, 3. MARCH, and the resulting double column of fours was not only handy in itself but could be readily formed in double rank without regard to right or left, front or rear rank, or counting fours and deployment again was equally easy.

PARTICIPATION IN INTERNATIONAL MILITARY HORSE SHOWS.

By CAPTAIN GUY V. HENRY, THIRTEENTH CAVALRY.

ON page 337 of the September issue of the CAVALRY JOURNAL there is a short article giving an unofficial British opinion of officers participating in these events, who are not up to a proper standard in this class of horsemanship.

The following may be of interest by showing the French official opinion on the same subject.

BULLETIN.

Official Bulletin No. 4, 1913, of the Minister of War. Circular concerning the Participation of Officers in International Horse Shows:*

"International Horse Shows are becoming more important each year, and the equestrian contests which take place in these are exercising a real effect on the reputations of the cavalries represented.

It is apparent that our participation in these international contests should be very carefully organized so as to assure to us the best chances of success.

Therefore, the following observations and requirements will be communicated to all bodies of the mounted service: Organization in view of an international horse show comprises:

Training of officers liable to be designated to take part.

Designation of officers and horses.

Methodical preparation of the latter.

This year, as usual, French officers have emphasised in the international contests, their brilliant qualities of dash and energy and have had great success.

However certain of them have not been absolutely correct in their position or above criticism from the point of view of

*Translated by First Lieutenant Adna R. Chaffee, Jr., Thirteenth Cavalry.

the management of the horse. That is why it is necessary to request all officers to hold closely to the conservative, classic equitation taught at Saint-Cyr and Saumur, the guiding principles of which carefully maintained and applied, allow the riders to give their horses sufficient training, without which no management is possible, and in consequence, to meet and overcome all difficulties.

These principles are precisely those which are contained in the Regulations and more fully set forth in the Manual of Equitation and Horse Training.

In so far as the designation of the officers who desire to take part in the international contests and the designation of their horses is concerned, the rules in force still govern. (Instruction dated February 20, 1912.)

Higher commanders, when indorsing such requests, will note thereon as explicitly as possible their opinion of the ultimate chance of success of the officers and their horses.

It will be understood first of all, that no officer will be permitted to take part in an international horse show without having had success in horse shows at home. Likewise the horses designated must have had creditable performances.

Officers who are not known to be adroit, vigorous and absolutely correct riders and skillful trainers, will be thrown out.

In spite of their previous successes, those horses will be cast aside in the same manner which, through fatigue or blemish may have become less capable jumpers than in the past.

Finally, the horses destined to be shown in the contests of an international horse show must undergo a methodical preparation in view of these tests. Each horse show, in fact, presents its own peculiarities.

Officers who intend to take part in anyone of these horse shows should communicate directly with one of their comrades who has formerly competed there so as to inform themselves as to the rules of the show, the configuration of the track, the influence of speed, the nature of the obstacles, the qualities, etc., which a horse should possess in order to succeed there.

In so far as special obstacles are concerned, it is undeniable that a horse who has become familiar with them will clear them

better than a horse who does not know them and who is surprised by their novelty.

Therefore, funds will be allotted for the construction of such obstacles, to those regiments which have officers and horses capable of being designated to compete in the international horse shows. On the 15th of January of each year, regimental commanders in complying with these conditions, will request funds from the War Department under authority of this circular. The following information will be given:

Names of officers judged to be suitable.

Success which they have previously had.

Names of horses which they would be able to ride.

Performances of these horses in detail.

Drawings of obstacles which it will be necessary to construct for the preparation of the horses.

Finally, all officers should be fully impressed with the fact that those among them who are designated to compete in international contests are, by the same fact, charged to defend the honor of our methods of equitation, that their successes or their defeats have an indisputable influence on the reputation of our cavalry, and that they should put forth every effort to maintain and heighthen the prestige which the latter enjoys in foreign countries.

BREEDING AND RAISING HORSES FOR THE UNITED STATES ARMY.

BY M. F. DE BARNEVILLE, FRONT ROYAL REMOUNT DEPOT, VA.

ALMOST every first class nation has been confronted in the past ten years with the arduous and intricate problem of finding an adequate supply of horses to remount its cavalry not only in time of war, but even in time of peace. Mechanical traction has almost everywhere reduced the demand for horses, thereby reducing also the production, as the farmers can no longer see their way clear to raise an unmarketable product and have turned to cattle raising as a more profitable industry. In every country maintaining an army, the government is the largest buyer of horses, and as army horses are about the only one still in demand, the various governments have found it necessary to take steps, in order to meet the economic change of conditions, to encourage the farmers and breeders in producing a sufficient number of horses of the type desired.

The United States Army, with its fifteen regiments of cavalry needs but an average of 2000 new horses every year to replace those that have died or become unserviceable; yet, with the millions of horses in this country it has been found almost impossible to provide annually 2000 animals of a suitable type for cavalry use; of draft stock there is a plentiful supply, but what is needed is the saddle-bred and half-bred type, now fast disappearing.

To remedy this scarcity of horseflesh, the United States Government has gone into the horse-breeding business in co-operation with the farmers, furnishing them free of charge the services of well-bred stallions for their mares, providing that the colts will be sold when three years old to the army. In addition to this, the War Department has established Remount Depots where the young colts purchased throughout the coun-

try are gathered and partly trained until they become old enough to be issued to the army. This enables the War Department to buy colts much cheaper than mature horses would cost, and the overhead expenses incident to their upkeep at the depots until they become of age is considerably less than the difference in price between colts and mature horses. Besides, these young animals are under close and constant observation and receive better care and veterinary treatment than they would get had they remained on the farms of their former owners.

To become acquainted with the conditions surrounding the life of a young colt after being purchased by the War Department, let us make an inspection of the Front Royal Remount Depot, one of the three maintained by the army as a receiving and training station for its future cavalry horses.

Situated in Warren County, Virginia, a few miles from the picturesque Shenandoah Valley, the Front Royal Remount reservation extends over five thousand acres of rolling land in the Blue Ridge mountains, eight hundred acres of which are in timber and the balance in rich pastures of the blue grass variety. Through the center of the reservation a good macadamized road winds its way across Chester Gap, connecting the town of Front Royal with Rappahanock County; for several miles on either side of this road the land belongs to the government and is enclosed by a six foot wire fence extending over thirty-two miles around the reservation. From the sides of the mountains numerous springs come bubbling down into Harmony Hollow where they swell the narrow stream of water known as Happy Creek, a tributary of the Shenandoah River.

Selected in 1910 by the War Department upon the recommendation of Major General J. B. Aleshire, Chief of the Quartermaster Corps, this land was purchased during the fall and winter of 1911 from about thirty-five owners at a cost of \$200,000.00 appropriated for this purpose by Congress. The nature of the soil which is mostly limestone helps the growth of young horses, being greatly beneficial to the development of bone; in addition to this, continuous climbing of the rocky slopes over which the animals roam at liberty helps to strengthen feet and muscles and hardens the body.

The colts at Front Royal are purchased in what is known as the Front Royal Remount Zone, which includes all the Eastern states from Maine to Florida, and as far west as the Mississippi. Until now, Virginia and Kentucky alone have supplied this depot, but in course of time the other states, especially Tennessee, West Virginia, Pennsylvania, New York and the New England states will be canvassed for good horse-flesh. Officers of the Quartermaster Corps detailed at the Depot make frequent buying trips through the zone, wherever suitable animals have been reported. Two trips to Kentucky, one in the spring and one in the fall of each year bring in each three or four carloads of young stock, mostly half-bred and saddle-bred. Virginia is thoroughly canvassed all year around for good material and its half-bred hunter type meets every requisite of the ideal cavalry horse.

At the present time there are over six hundred animals on pasture at the Front Royal Depot; all of these have been purchased in the open market, directly from the breeder or owner instead of by contract as in the past; in this way a market is open to the small breeders who can only put up a few colts for sale annually. By doing away with the purchase by contract system and eliminating the middleman, the government can buy better horses at a greatly reduced price, saving at least \$25.00 on each animal.

Upon arrival at the Depot, the colts are weighed, measured for height and, when necessary, are inoculated with an immunizing serum against shipping fever. They are also branded on the hoof with a serial number, and as this identification mark might become obliterated in time a corresponding number is tattooed on the inside of the upper lip with a special set of needles dipped in indelible ink; this method which originated in the English army is almost painless and has been found extremely practical in identifying horses whose hoof numbers had worn out.

Any colts showing symptoms of sickness are taken to the veterinary hospital, a most up-to-date structure built of hollow tile and cement floors standing in the center of the reservation; it has a complete equipment, including a revolving operating table, and an experienced personnel of attendants to take care

of the sick animals; two wards in separate buildings can accommodate about thirty patients, besides several box-stalls in the main hospital where the most serious cases are treated. Next to the hospital is a dip where horses suffering from skin diseases and parasites are immersed in water containing a disinfecting solution.

All colts coming to the depot are turned on pasture where they graze during the summer and fall; in winter and spring they are fed grain, bran, corn and hay, in sheds constructed at various points on the reservation. Being out in the open all year around, the young horses become hardened to changes of temperature and atmospheric conditions; all those showing signs of emaciation are given extra rations. Horse herders ride over the pastures every day, inspecting the stock, taking the sick and injured to the hospital; twice a week they make a count of the horses, reporting same to the office.

From time to time, green colts are brought down to the town stable where they are given an elementary training, being broken to the saddle and made bridle-wise; when one lot has gone through this schooling it is taken back to the pasture and another lot brought down.

Clerks in the Quartermaster's office, in Front Royal, keep statistical records of the breeding and physical condition of all young horses; and at various intervals the colts are weighed and their height and girth measurements are taken; it is thus possible to determine the relative growth of the thoroughbreds, half-breds, standard-breds and saddle-breds and the amount of feed necessary to keep them in condition.

The cost of keeping colts at the Front Royal Remount Depot has been reduced to a minimum in view of the fact that a large part of the forage and grain consumed is raised on the reservation; this year the corn crop covers thirty-five acres and there is also plenty of oats, timothy, hay and alfalfa wherever suitable soil has been found for the raising of these crops. Kentucky blue grass is sown yearly in places where the native crop has become exhausted.

In such favorable surroundings the young colt spends the first and sometimes the second year of his army life; he will then be issued to some cavalry regiment or sold to an officer.

Although Remount Depots are of recent origin in this country, the first one at Fort Reno, Okla., being established only in 1908, and the one at Fort Keogh, Mont., one year later, good results have already been obtained and the effects of the new system have been recognized and appreciated by every true horseman in the army. But there are still greater possibilities in the new remount problem, for it is not only important to provide a sufficient number of horses for the army, it is also necessary to standardize the type so as to get a uniform product; and to do this the farmers must be educated to breed their mares to government stallions, these stallions having been especially selected for their suitability as sires of cavalry horses; and this education of the farmer has recently been undertaken by the Department of Agriculture coöperating in this way with the army in the solution of a problem in which every true American should be interested.

ENDURANCE TEST.*

BY FIRST LIEUTENANT RALPH M. PARKEP, U. S. CAVALRY.

THE endurance ride which took place September 16 and 17, 1913, under the auspices of the Morgan Horse Club, proved a marked success from the standpoint of the Army, inasmuch as it showed what horses of certain breeds could be called upon to do in emergencies, and without injury. It was a disappointment to every one who was interested, however, that so many entries were withdrawn at the last moment, for what reasons I am unable to give. It is probable that owners of good horses were afraid to risk injuring the animals, or else could not find experienced riders for them. However, of the sixteen entries supposed to start there were but nine who arrived at Northfield, Vermont, for the test.

The ride was to commence at Northfield at the stables at Norwich University, and pass through Waterbury, Stowe, Morrisville, St. Johnsbury, Thetford to White River Junction.

The conditions were:

ENTRIES.

This endurance ride will be free for all, and open to all horses of any breed. No entrance fee will be charged. All entries should be sent to C. C. Stillman, Secretary, The Morgan Horse Club, 165 Broadway, New York City, on or before September 1st, 1913.

ROUTE.

Northfield to Waterbury, Waterbury to Stowe, Stowe to Morrisville, Morrisville to Hardwick, Hardwick to St. Johnsbury, St. Johnsbury to White River Junction.

*Held under the auspices of the Morgan Horse Club.

POINTS.

Condition on arrival at finish: Excellent.....	50
Condition on arrival at finish: Good.....	25
An average of six miles per hour.....	50
An average of five miles per hour.....	35
An average of four miles per hour.....	25
For each five pounds carried over 160.....	2

CONDITIONS.

Total distance traveled must not be faster than six miles per hour, including all halts, nor slower than four miles per hour, including all halts.

The ride to terminate in front of the judge's stand State Fair Grounds any time between 11 A. M. and 4 P. M., September 17th, 1913.

Each contestant to leave Northfield at any hour he may elect, provided he arrives at the destination within the time limit set, viz: Earliest hour for leaving Northfield is 8:30 P. M., Monday, September 15th, 1913, and is determined by dividing the total distance by four and subtracting this result from 11 A. M. of the date set for the termination of the ride. The latest hour of leaving is 2:20 P. M., Tuesday, September 16th, which will be determined in the same way, only using six for a divisor and subtracting result from 4 P. M. of the date set for the termination of the ride.

Each horse to carry not less than 160 pounds. Any kind of equipment.

Arrangement will be made for feeding and stabling horses at Waterbury, Stowe, Morrisville, Hardwick, Summit, St. Johnsbury, Wells River, Bradford, Thetford, and the State Fair Grounds.

As soon as each horse arrives at the Fair Grounds, the judges will inspect it, noting its condition and crediting it with the necessary points. The following day at 10 A. M. these horses will be again inspected, and if this last inspection warrants it, the points given for *Condition* the previous day will be changed. All necessary information about stabling arrangements etc., will be furnished later to the actual contestants.

PRIZES.

1st prize	\$100.00
2d prize	50.00
3d prize	25.00

In addition to these premiums, there will be given to each one of the first ten contestants who finishes the Endurance Ride a small cup suitably engraved.

The ride was for the purpose of demonstrating the superiority of the Morgan horse over all other breeds, (particularly the larger ones) for hard work under a rider and on short forage.

The starters were: Halcyon, owned by Spencer Borden of Fall River, Mass., a chestnut mare, 7 years old, a three-quarters Arab, $15\frac{1}{4}$ hands high, weight 840 lbs. She was ridden by Captain H. H. Reid, Norwich University. She had been in training for the ride only about three weeks when she was run into by an automobile and had her leg badly cut in three places from the hock to the pastern joint, which caused the tendons at the back of the leg to swell and to remain swollen until the time for the ride to commence. She had been treated for this trouble up to the minute of the ride, and it was feared that her condition would prove fatal to her success in such a test. Owing to her excellent breeding and good nerve, the little mare made the test excellently.

Ethan, a Morgan gelding, the property of Norwich University, $15\frac{1}{2}$ hands high, 7 years old, weight 933 lbs., rather gaunt looking, heavy through the shoulders, and light behind, was ridden by Captain R. C. Kimball, Norwich University; had been ridden all summer and was in excellent condition for the test.

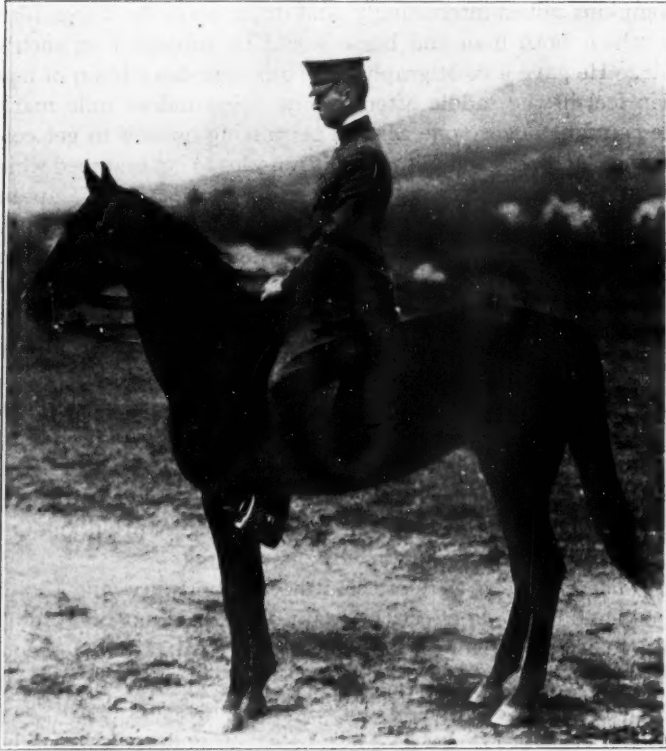
Yaquis, owned by Spencer Borden of Fall River, Mass., is a pure bred Arabian white stallion, 13 years old, weight 925 lbs., ridden by Lt. Ralph M. Parker, U. S. Army.

Rodan, owned by Spencer Borden of Fall River Mass., pure bred Arab stallion, chestnut, $15\frac{1}{4}$ hands high, six years old, weight 885 lbs., ridden by Malcolm Grinnell, Mr. Borden's trainer.

Nannie, owned by Norwich University, a Morgan mare 15 hands high, age nine years, weight 1,025 lbs., ridden by Cadet Rosmeisal, Norwich University.

Nixie, owned by Norwich University, a Morgan bred gelding, about $15\frac{1}{4}$ hands high, weight 890 lbs., age eight years, ridden by Cadet Lieutenant O'Donnell.

Babe, property of Mr. Edward S. Ballard, a former cadet of Norwich University, is a Morgan bred pacing mare, about 15 hands high, weight about 950 lbs., ridden by Mr. Ballard.



HALCYON.

Winner of first prize in Endurance Test—154 miles over hilly country, carrying 180 lbs; time 30 hours and 42 minutes. Captain Reid, Norwich University up. Three quarters Arabian. Owned by Spencer Borden.

Lyndon, owned by Mr. E. A. Darling of Lyndonville, Vt., six years old, about $14\frac{3}{4}$ hands high, weight 850 lbs., ridden by Mr. Weatherbee.

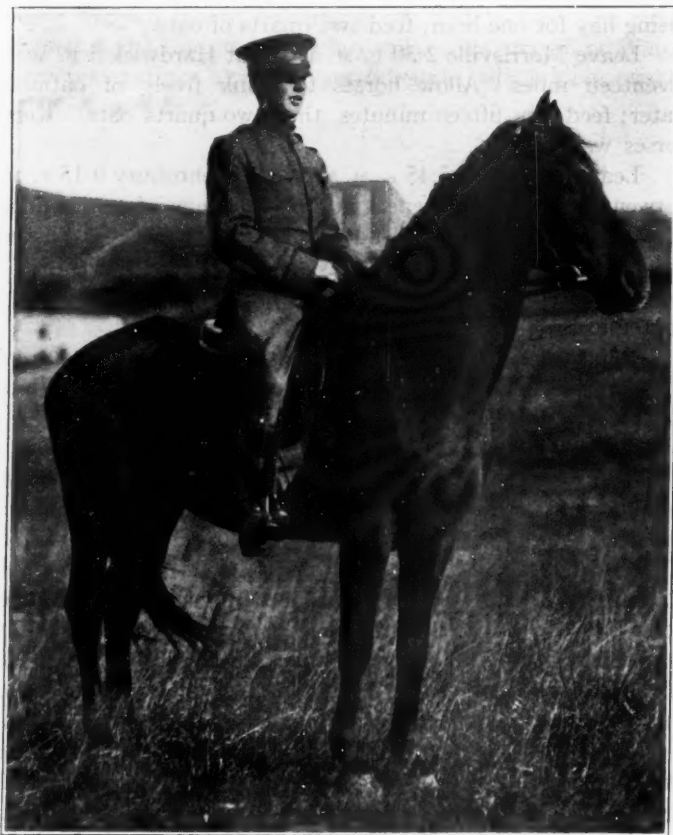
Indian Girl, owned by Dr. Brown of St. Johnsbury, white Texas mare, weight about 850 lbs, ridden by Dr. Brown.

On the afternoon previous to the commencement of the ride all of the contestants were assembled, and an informal talk was given by Captain Tompkins, U. S. Army, on the subject of "*Long Distance Rides*" at which everyone was invited to ask all the questions possible, as to conditions, rules, etc. Captain Tompkins talked interestingly, and dwelt upon the discomforts to which both man and horse would be subjected on such a ride. He gave a most graphic and amusing description of how men feel in the saddle after passing the hundred mile mark. He cautioned every one against permitting himself to get cold during the night, and allowing his muscles to get cramped while resting. Having been on several rides of this kind, Captain Tompkins was well equipped with knowledge which I knew would prove most valuable to any contestant who would listen to him. With the exception of Mr. Weatherbee and myself, long distance riding was something new to all the contestants, and I knew that it would take considerable nerve and grit on the part of the young men who were going into this test to "*stick it out*" and ride properly in their saddles in order to give their horses every possible advantage due them for the undertaking. The question of gaits was gone into, and all were told how much a horse could stand at certain gaits, and on the level road, inclines, etc., just when and how to dismount and mount, when to stop for watering, feeding, resting, etc.

These matters were of the utmost importance, and I knew if adhered to would affect the result of the ride most favorably, and so it proved for those who did so. All the contestants, with the exception of Mr. Ballard rode Park saddles, Mr. Ballard using a western saddle. The rules to abide by were gone over carefully, and all were given to understand that between regular halts no contestant should receive any assistance whatever in conducting himself and horse over the route. Dismounting and leading was permitted as in the manner of a forced march of a military command, the leading always to be done by the contestant, who would proceed, only, by walking himself, or riding his own mount. When these points and some others had been gone over, all agreed to abide by the following schedule, as nearly as practicable:

HOW THE ENDURANCE RIDE SHOULD BE CONDUCTED.

Leave Norwich University stable at 6 A. M., September 16th, arrive at Waterbury 9:30 A. M.,—distance twenty-four miles. Unsaddle, allow horses to drink freely of oatmeal water, feed hay, keep back covered.



ETHAN.

Second in Endurance Test; time 30 hours and 44 minutes, carrying 175 lbs. Captain Kimball, Norwich University up. Pure bred Morgan.

Leave Waterbury 10 A. M., arrive Stowe 11:30 A. M.—distance ten miles. Allow horses to drink freely of oatmeal water.

Leave Stowe 11:35 A. M., arrive Morrisville 1 P. M.—ten miles. Have horses legs and feet well washed and bandaged; thoroughly dried and rubbed with a mild liniment; at the same time see that the back is thoroughly dry by rubbing. While this is going on the horse should be encouraged to eat hay—first having been given a few swallows of oatmeal water. After eating hay for one hour, feed two quarts of oats.

Leave Morrisville 2:30 P. M. arrive at Hardwick 5 P. M.—seventeen miles. Allow horses to drink freely of oatmeal water; feed hay fifteen minutes, then two quarts oats. Keep horses well covered.

Leave Hardwick 5:45 P. M. arrive St. Johnsbury 9:15 P. M.—twenty-two miles. Repeat at St. Johnsbury what was done at Morrisville, except feed no oats, but let horses eat all the hay possible.

Leave St. Johnsbury 10:30 P. M. arrive Thetford 6:30 A. M., September 17th—fifty-four miles.

Repeat at Thetford what was done at Morrisville. Leave Thetford 8:30 A. M., arrive Fair Grounds 11:00 A. M., via White River Junction—seventeen miles.

Total Distance 154 miles.*

The following morning upon going to the stable for our mounts it was found that the riders of Indian Girl and Lyndon had left at 2:47 A. M. At 5:55 A. M. Private Rossmeisl on Nannie and Mr. Ballard on Babe started. At 6:08 A. M. Captain R. C. Kimball on Ethan accompanied by Lieutenant John C. O'Donnell on Nixie started. I had intended to start with Captain Reid and Mr. Grinnell, keeping the three Arabs of Mr. Borden's together throughout the whole trip. It was my purpose to start last so that by gaining on the leading contestant I might follow him closely all the way, and ride on to the Fair Grounds at the same time, thereby beating him with the three Arabians by the number of minutes difference between his time of starting and mine. But owing to certain business that I was called upon to transact at the last minute I was forced to wait. I had the riders of the other two Arabs start ahead at 6:13, promising to overtake them in the first twenty-three miles. I had started at 6:19 A. M., when I was stopped again

*Distance was measured just before the race.

in order to attend to some further matter that required my attention. This caused me to lose ten minutes time.

Our plan was, it will be noticed by the schedule above, to stop at Waterbury one and one-half hours, arriving there at 7:30. I arranged my gait so as to catch up with my team one mile out of Waterbury, in order to make sure of the horses being watered before reaching town, and to have the riders dismount and lead in for the last mile. We arrived at Waterbury ten minutes ahead of our schedule, which gave me the



YAQUIS.

First in Endurance Test—placed third on account of weight carried—154 miles over hilly country, carrying 160 lbs; time 30 hours and 37 minutes. Pure bred Arabian. Pardon the position of rider who was fixing his right stirrup strap when snapped. Lieut. R. M. Parker up.

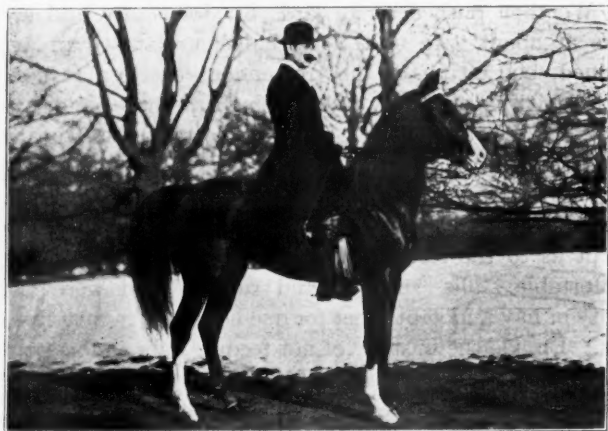
opportunity of either gaining that much on those ahead of me, or taking it out in additional rest for the horses. I decided on the latter. I found that the first two had left at 8:30 A. M., which gave me a start on them of more than one and one-half hours. The other contestants took less rest than my team did, pushing ahead to catch the two who had started first. We stuck to

our schedule and started from Waterbury at 10:00 A. M., and when about six miles out, overtook Mr. Ballard on his pacing mare. He joined my party and the four of us rode in couples a few hundred yards apart on account of the dust, for the next four miles, into Stowe. Here the horses were given oatmeal water to drink, which they seemed to like very much. No longer stop was made than just sufficient to water them. Quite a crowd of people had assembled to see the horses pass through, everyone, of course, thinking that the Arabians had been left behind due to their position in the race. The comments from the farmers were most amusing.

We arrived at Morrisville at the time appointed in the schedule and found all of the contestants there. We had caught up with even the first of them, and our horses were as fresh as could be. At this stop the horses were stabled, and were sponged, dried and blanketed, and their legs were rubbed with a mild liniment. They were fed hay as soon as they arrived, and half an hour later were given two quarts of oats. They had been watered just before entering the town, and had been led in for about three-fourths of a mile which gave them time to become normal. The roads over which we had passed up to this point were alternately soft dust and hard gravel, few places being favorable for marching. There were several short hills, but nothing to tax the horses much if taken at a walk. The attention given our horses at the stables of Lunt & Bedell was most excellent. When we had been there about a half hour, Lyndon and his partner, Indian Girl, moved out, and were quickly followed by all other contestants except the Arabians. I stayed there until our horses had had a full hour and a half of rest, and then started out, in accordance with our schedule. The others were evidently trying to beat the schedule, which I knew would prove of little use.

A few miles out of Morrisville I overtook Cadet Rossmesal and Mr. Ballard, and they stuck to my party all the way into Hardwick, a distance of seventeen miles. As before, we watered before reaching the town, and led up to the stable. I found a large crowd swarming about the stable, and the air was so close and foul in the stable that I had our horses taken into the street. There was no one to handle the crowd, and they pushed into

the stable to such an extent as to cut out all the fresh air. I then found a large carriage room and placed the horses in that, but even there the crowd came in around us, and annoyed the horses and ourselves considerably, interfering to some extent with the horses' rest and feeding. We arrived here at 5 P. M., and found all the contestants resting. We first fed hay, and later two quarts of oats. The horses were bright and feeling quite normal upon leaving Hardwick. As little time had been given the horses for the digestion of their grain, my team walked and led the horses for fifteen or twenty minutes. Upon Captain Reid's mounting, the little mare stepped on an uneven



RODAN.

Fourth in Endurance Test; time 30 hours and 42 minutes. Pure bred Arabian stallion. Mr. Grinnell up. Owned by Spencer Borden.

stone and twisted her injured leg badly. This gave me quite a scare so we dismounted and examined it. After leading her around for a minute or two we succeeded in walking her out of the lameness. The little warmth that we had begun to feel at about 2 o'clock in the afternoon had disappeared by this time, and we were in for cooler riding from this time on.

The others all left rather hurriedly upon my arrival at Hardwick, but long before we had reached the half-way point to the next stop, St. Johnsbury, twenty-four miles distant,

we had overtaken the two who had given us so much company on the last stretch. This was the most difficult part of the trip. We found many long, steep hills to pass over, most of which made it necessary for us to dismount and lead, both up and down.

On reaching Danville inquiry was made as to how long before us, the various other contestants had passed through. We were informed that Lyndon and Indian Girl were in the livery stable there, at that time. This made us feel a whole lot better, for those who had started out first we were up with now, and we had consequently gained about three and a half hours on them.

We then pushed on towards St. Johnsbury and arrived there at about 9:45 P. M., one half-hour later than we had planned, but owing to the tremendous exertion in covering the hills, it was necessary to lose some time here, and save our horses for the race which I knew would take place during the last seventy-three miles of the trip. We brought our horses into St. Johnsbury in fine condition. At this place the same treatment was given the horses as was given at Morrisville, except as to the feeding of the grain. They were placed in comfortable stalls, sponged and rubbed, and were allowed plenty of hay and kept quiet for one hour and twenty-five minutes. I made the mistake of not feeding oats at this point, as I had done at Morrisville. The horses remained here long enough to have had their grain without danger of colic. The riders got a lunch and at 10:10 P. M. were ready to proceed. All the entries, except the two who stopped at Danville, were there when we arrived, and left anywhere from fifteen minutes to half an hour ahead of us. The other two whom we had left at Danville came through at about 10:00 P. M. They had their equipment weighed, as we were all required to do at this point, and then proceeded without further rest. We were the last to leave, as before, but I had the intention of catching the head of the procession, and staying with it before I had gone fifty miles. We had seventy-three miles to catch them in, and I knew that push as they might, those in the lead could not keep us from gaining on them. We gradually crept up on each couple that was ahead of us, reaching the first in a

very short time. It was not long, probably an hour, before we caught sight of Captain Kimball and Lieutenant O'Donnell who, up to this time, had tried to lengthen their lead on us. The first two we overtook stayed with us; the next two when they saw us so near, struck up a fast gait and pushed out of sight again. So bent was I on staying with this pair, whom I at this time considered our most dangerous opponents, that I proceeded by dismounting and leading at a trot up and down the slopes, mounting and continuing to trot when we reached the level stretches. As the road was hilly in many places for thirty or forty miles this task became a bit arduous, but I knew that by keeping at it we were bound to overtake those in front of us. In order to keep up the pace it was necessary for us to keep trotting; but to remain mounted, going up and down these hills, would have made the horses both tired behind and sore in front, which condition would have put us out of the race. We covered many, many miles in this strenuous manner. None of our horses were showing the slightest sign of leg weariness, and were all looking along the road with their ears forward as though they were as interested in the undertaking as the riders.

At a point about fifteen miles from St. Johnsbury we overtook Lyndon and his partner, and passed them by easily. From this time on I saw nothing more of this couple. About two miles further on the mare, Halcyon, cast a shoe, so we all dismounted and walked to the next town, a distance of about two miles, where we left her and her rider to attend to the shoeing.

We had engaged Mr. Scott Welch, of Northfield, with his automobile, to go along as messenger, and to act as a sort of referee. This gentleman preceded us to the town of Wells River and at 3.00 A. M., had a blacksmith waiting for us on our arrival. Captain Reid succeeded in having the shoeing done by the light of the automobile lamps, and had been instructed by me to follow us at the best pace he could make. The mare was apparently as fresh as could be, still moving along with a light and springy stride, swinging her head about from side to side as if she had been out only for a short time. I knew from her condition and from the record of her mother

that if her right hind leg did not weaken, she could catch us before we arrived at the end of the journey. We could not go any faster than we were going already on account of the hills that had to be climbed and descended without danger of doing harm to the animals. I was willing to take a risk on Halcyon, for at this time it was only a question of her right hind leg. Her general condition warranted attempting much faster speed.

We left Wells River at 3:00 A. M., having covered 102 miles in twenty hours and forty-five minutes. An hour later of this fast work up and down hills and on the level, we overtook Captain Kimball and Lieutenant O'Donnell, who made no further effort to keep ahead of us. They joined us then, and the six of us kept up good marching time straight on, and at 6:15 A. M., just twenty-four hours after leaving, we arrived at Fairlee, having covered 125 miles in one day, and with the horses and men feeling a bit hungry, but otherwise all right. Up to this time all the contestants had been talking and joking about the various muscles that had been brought to their notice by the long, continued exercise, but when breakfast time drew near, and no breakfast with it, conversation lagged, and everyone felt as though he would be glad to reach the next stop that we had arranged for. The last twelve miles were covered in two hours and twelve minutes, and we got to Thetford at 8:27 A. M., six of us, Captain Reid on Halcyon, having stopped at Fairlee for breakfast for himself and mount. He cut his rest short and joined us at Thetford in time to move out and finish the march with the rest of us. The little mare he was riding carrying the heaviest load of them all, had made up forty-five minutes which had been lost in shoeing, and when she joined us I knew that she should have first place. It might seem like an exaggeration to many, but when she came up to Thetford she was walking with a clean, long stride like that of a deer, and was looking around, noticing everything just as she always does upon leaving the stable for the first time.

While waiting at Thetford we were all watching each other to see that no one started out ahead. From this time on I knew that it would be a race of twenty-nine miles, which, on top of 137 miles of fast marching would amount to cruelty. So it was agreed that we would all go in together, and have our

places awarded by the judge upon condition and weight, the difference in time so far among the seven of us being so little that points gained on time would amount to nothing worthy of consideration. Had we pushed on in and made a race of it, the chances are that all of the horses in the first bunch would have lost so much on condition that the Lyndon horse, who was being nursed along the route, stood a chance of winning sufficient points on condition to give him first place. The horses were very little tired upon starting out from this point, and after traveling slowly for some distance, soon began to show the effects of their breakfast by getting stronger, and stepping out with a better stride, even to pulling on the bits. The riders as well as horses were in good humor now after having had a good breakfast and an hour and a half of rest.

Up to this time we had still heard nothing of Lyndon and Indian Girl.

We pushed on into White River Junction, making the remaining seventeen miles in two hours and forty-four minutes. We were marched past the Morgan Horse Club arena at 12:54 p. m. all the horses with their heads up and feeling fine. It was a special sight to see the Arabians coming in with their ears pointed forward and their tails held high, looking as proud as they do when turned out to pasture on a cold day.

Starting last, I took Yaquis through in thirty hours and thirty-seven minutes, the other two Arabs coming in thirty hours and forty-two minutes, Ethan and Nixie in thirty hours and forty-six minutes, Nannie and Babe, thirty-one hours and two minutes. Lyndon came in about 3:02 p. m. having made the trip in thirty-six and one-quarter hours. We reported to the judge of the race, General A. L. Mills, U. S. A. who passed upon us, and found the condition of the first seven to be practically perfect, and awarded positions for prizes as follows:

1st.—Halcyon; time thirty hours and forty-two minutes; allowed eight points for carrying twenty pounds overweight.

2d.—Ethan; time thirty hours forty-six minutes; allowed six points for fifteen pounds overweight.

3d.—Yaquis; time thirty hours thirty-seven minutes; no points allowed for overweight.

4th.—Rodan; time thirty hours forty-two minutes; no points allowed for overweight.

The condition of these first four horses was excellent, there being practically no difference between them.

The other horses, Nixie, Nannie and Babe came in in good condition and took a very few minutes longer to make the trip. They were awarded places in the order mentioned.

Lyndon was the last to come in, having made the trip in about thirty-six and one-fourth hours. Indian Girl did not come in at all.

Everything appeared to be satisfactory, all the horses that came in having passed satisfactory examinations before General Mills. The question now was, how would they show up in the morning? I do not think there was one of us who expected to see the horses in as good condition then as they were in on their arrival. However, on going to the stable next morning, much to my surprise and relief, the horses were brought out of their stalls appearing if anything better than they did the day before. No exercising had been done to supple them up, nor any particular treatment given them to keep their muscles pliable. The reason for their excellent condition is that all these horses were unusually good, sound animals and able to do more than ordinary horses without showing signs of breakdown.

As a result of the second day's inspection the horses were found to be in condition warranting their keeping of the places awarded them at the first inspection. I was with these horses, more or less, all through the trip and I know what their conditions were all the time, and had I been judging the result I would have placed them just as they were placed by General Mills. Yaquis would have made first place easily had I put sufficient weight upon him, for he could have carried a far heavier load than he did. I judged, however, that the horses carrying the extra weight would lose so much on account of their condition at the end of the march that the others would have an advantage over them with their lighter loads. In this I misjudged the horses, for they all came through as though they had not been carrying anything like their full capacity would permit. I realized this when I had gone about 115 miles. When I caught up with Captain Kimball I expected to see Ethan showing more signs of distress than he did, in fact he showed none at all, and

was going perfectly strong and free throughout the ride; nor did Halcyon, Yaquis or Rodan show the slightest sign of fatigue at any time, and Rodan, whose condition was not quite as perfect as Yaquis, came in for fourth place.

These horses could have been forced through in a shorter time, but it was not to the interest of the Morgan Horse Club to have any horse injured in this test. Considerable protest had been made by certain influential parties against the carrying out of the race in the first place, and it was partly this and partly my own feeling for the animals that made me use my influence to have the horses brought in in perfect condition. Had any of the horses been damaged due to cruel riding it would have meant that no further test of the kind would ever be permitted. The ride showed all the Morgans equal to the work they undertook. It must be remembered, however, that these horses, with the exception of Lyndon, had been ridden all summer and were fairly well hardened for the race. But the Arabians who came in for three of the first four places, and really came in ahead of all the others so far as time and condition counted, had scarcely received any particular preparation for the ride.

This test showed two excellent types of horses of great endurance. They made 125 miles in the first twenty-four hours, and without stopping continued the march finishing twenty-nine miles more in excellent marching time, arriving at their destination in condition that would have warranted their doing fifty or seventy-five miles more, had there been need of such a march, and this without danger of harming them. The Arabians which took part in the ride are all excellent types, having fine withers, easy, steady gaits, and are all able to keep up marching for Heaven knows how long, on the scantiest kind of rations. They had but six pounds of grain and a little hay during the entire ride.

Regarding the preparation that these Arabians had, it might be of interest to know the conditions under which they entered the contest. The mare Halcyon had been systematically exercised for only about three weeks before the test and was we thought, in fairly good condition except that I considered her a trifle thin. She had been doing practically nothing all summer. Yaquis had been ridden scarcely eight miles a day for a

week before the Endurance Test. Ten days previous to the ride I rode him to Windsor, Vermont, a distance of about seventy miles, going to Windsor September 5th and back to Northfield on the 7th. I did this to ascertain if there was any unsoundness before placing him in the test. This being all the training that this horse had, he was very fat and apparently very soft. The exercise that he had had during the summer amounted to only about two or three miles a day at a walk and ridden by a young girl. Rodan's preparation consisted in being ridden from Colonel Borden's place at Fall River, Mass., to Northfield, Vt., a distance of 267 miles, most of which was over hard roads. This march he made in five days, making nearly 70 miles on the last day. He was not selected to go into this race until about September 3d, when it was too late to commence training. He arrived at Northfield on September 7th and had regular light exercise every day until the race came off. From this it will be seen that the Arabian horse can be called upon to perform great feats of endurance at any time and almost regardless of his condition.

The day following the final judging of the Endurance Ride, Yaquis, Ethan and Halcyon entered the Charger Class at the White River Junction Fair, which consisted of the usual performances for such classes, including jumping. Yaquis, ridden by myself, took the blue ribbon; Ethan, ridden by Cadet Peabody, took the white ribbon; and Halcyon, ridden by Captain Reid, took the yellow. Second place was won by Lady Marco, owned by Captain Frank Tompkins, Tenth U. S. Cavalry, and ridden by Major H. L. Putnam, Norwich University.

As soon as this class was judged, all the entries in it started on a fifty-one mile march back to Northfield, Vermont. The ride was easily made by both men and horses in nine and one-half hours. One and one-half hours having been taken for rest and feeding; average marching time, therefore, was six and three-fourth miles per hour. These horses have not shown the slightest signs of discomfort due to the march, and have been on duty ever since.

From what I have seen of Colonel Spencer Borden's Arabian horses, including those at his stud at Interlachen, I

think that their suitability for cavalry use is unquestionable. From the standpoint of economy, these horses will keep in condition in campaign when forage is scarce, on probably half of what it would take to keep the larger animals. This of course means great economy in field transportation. From the standpoint of efficiency, these animals will take a two hundred pound man over the Officer's Obstacle Test Ride with the greatest ease, and I believe will do it at the end of a sixty mile march under the same man. All of Colonel Borden's horses which we are using at Norwich University are good jumpers and are in every way most suitable for cavalry purposes. Their dispositions are perfect. History shows their breed to have been raised in the families of their owners for thousands of years. They would win their way into the heart of the roughest soldier and receive treatment at his hands that the ordinary horse would never get. It is a well known fact that in every troop there are many horses which are pets and whose lives have been much prolonged due to the kind of treatment they have received at the hands of the troopers.

Taking it all in all, therefore, I regard the Arab horses that we are fortunate enough to have in this country, a most admirable source for the improvement of our army horses.

Next year it is hoped that an endurance ride will take place and that it will be a ride of several hundred miles, with many entries from the cavalry. It is quite probable that there are many owners of good horses in the army who would like to enter such a race against the Arabians. It is probable that a team of Norwich University cadets mounted on Arabians and Morgans, will be there prepared to make the claim good that small horses, Arabians in particular, are all that history has shown them to be.

THE PEACE TRAINING OF CAVALRY.*

BY CAPTAIN W. H. MCCORNACK, TENTH CAVALRY.

IN TIME OF PEACE PREPARE FOR WAR.

* * * * *

THE truth of the saying "*In time of peace prepare for war*" has never been doubted. It is the application which often presents the difficulty, because men will not believe there is danger where they cannot see it, and they cannot see it where they will not look. Once convinced that there is danger, man has never failed to fight to the last extremity, to conquer or die in the attempt. In recent years, many municipal governments have become so steeped in corruption from many years of heedlessness that the stench could no longer be endured, and the people have arisen in their might and finally abolished the evil from their midst. So also history gives us many examples of nations arming in mass to repel the invader. The difficulty has not been to induce a people to fight when the foe appears, but to foresee the danger, and recognizing it, take steps to ward it off before it actually threatens.

Our natural pride in our profession is sufficient to keep us awake to the political situation; what other nations are doing and what our needs are, so that we can ask Congress to provide us with the latest refinement of weapons. Our greatest trouble in that line is, that we want so much that we cannot agree as to what is most needed, and what should be first supplied.

Let us not forget that it is equally our duty to train ourselves, with what is given us, to the best of our ability; to be prepared to meet any emergency that may arise to the best advantage with the tools provided. Until we have reached that state of training we have not fulfilled our entire duty.

*Thesis, Staff Class, Army Service Schools, 1912-13.

The more nearly each individual member of our army can forget his personal interests and devote his attention to his own individual task, the better is his duty performed; also, the better we are prepared to perform our own individual tasks, with the tools furnished us, the less liability will there be of disagreement when we are asked "What are the needs of the Country as regards the Army, or any part of it?"

It will not be the purpose of this paper to go into the details of instruction, propose schedules, or allotment of time to the various things it is necessary for us to practice, in the training of our cavalry during time of peace, but rather to discuss in general terms what we should aim to accomplish.

It has been claimed that there has been less change in the armament, equipment and tactical use of cavalry, than in that of any other arm. If that is the case we must look to it that we are not left far behind in the race; for, as General von Schmidt says: "It is only by a vigorous endeavor to bring about real and lively progress in our arm, that we can hope to keep pace with the other arms, into which, from a technical point of view, owing to modern inventions, and also intellectually, so fresh a life has been infused. This progress is as necessary as it is achievable, if we only adopt correct principles and constantly act upon them; not empirically groping about at random, but following a fixed and logical system in all branches of our service."*

Unfortunately, in formulating any system of training, there is bound to be some of the groping in the dark to which von Schmidt refers. This may manifest itself in the form of hobbies which are taken up and worked at for years, until a war comes along and demonstrates their uselessness; but it more often appears as a reluctance to depart from tradition, when the conditions are so changed as to render such a departure imperative. Therefore, it may be asserted, without fear of controversy, that only by studying the use of cavalry in war can we arrive at any idea of what should constitute its training

*"Instruction for Cavalry" by Major General Carl von Schmidt. British official translation, page 1. General von Schmidt was considered, perhaps, the leading Cavalry man of his time. This book was written shortly after the close of the Franco-Prussian war. Its author died in 1875.

in time of peace. In no other way will we be assured of any definite goal for the direction of our energies; for it must be evident that any training, to be of value, must be based on a thorough understanding of the purpose for which the training is undertaken and of the results to be aimed at.

In addition to considering what our own experience has been, it will be necessary to critically investigate what our neighbors are doing, and try to decide, from their conclusions, as to the aims of their training. Then, when we read our own history, we may be able to incorporate many features of value to us without being carried away with the idea that, since European armies are larger and in many respects more highly trained than ours, therefore, everything they do is better than anything we do, and everything that is good for them is equally good for us. In other words we want to put ourselves in the frame of mind to accept anything from other services that will be instructive to us, but not to accept anything until its usefulness for our purposes becomes evident.

The functions of cavalry in war may all be included under two general heads:

First.—Its employment as independent cavalry, or on missions so far separated by time or place from the infantry, as to be entirely independent tactically. As its tactical success or failure effects the general result only in so far as it effects the accomplishment or failure of its mission, such use has come to be quite commonly styled the *strategic* use of cavalry.

Second.—Its employment as divisional or corps cavalry in which use it is purely auxiliary to the infantry, and its mission is to promote the tactical interest of the infantry to which it is attached.

Although probably the tactical methods employed to accomplish certain ends will be the same in both cases, yet it is quite as probable that a given situation will call for entirely different solutions depending upon whether the cavalry is being employed independently or as divisional cavalry.

Since we are indebted to the Germans for many of our most valuable contributions to military literature, we would naturally seek the views of some of their recognized authorities, and in reading these authorities one is struck by the same

general thought that pervades all German military literature, that, among Germans, the idea of war is inseparable from the offensive.

Von Schmidt says, in speaking of the use of independent cavalry divisions in war:

"In the execution of similar missions, the principles just laid down must be especially attended to, which are briefly these:

"(1) Explore the country in front as far as possible by small patrols, which disappear from before the enemy and anon hang on to him again.

"(2) Keep the larger units, regiments and brigades, together on several roads not too far apart, so as to be able to concentrate as rapidly as possible.

"(3) Maintain a reserve by keeping back a brigade.

"(4) Keep up constant connection between the advanced guards and their following columns of route, as well as lateral communications, so that the division may rapidly concentrate in case of need.

"The conduct of a cavalry division on detached employment, and similarly of individual brigades, when entrusted with independent missions, should be in accordance with these principals or the spirit of them.

"It is in the nature of the case that only guiding principles can be laid down; in this sort of employment absolute rules are out of place. So much the more desirable, therefore, is it to have acquired a certain routine method of performing these important duties, such as will insure certainty in the result. The *Service Marches* (marches as if in the actual presence of the enemy) executed by regiments during time of peace, and the field maneuvers of two large bodies of cavalry against each other, afford the best opportunity for practicing this."*

Although the above was written nearly forty years ago, little fault can be found with it, in fact it comes very near to being the accepted principle today for the use of independent cavalry.

Von Schmidt, also says:

*"Instructions for Cavalry."—British official translation, page 177.

"The cavalry soldier should be able to fight on foot in small or large groups, to avail himself of the advantage offered by the ground, surmount the obstacles it presents, husband its ammunition, employ rapid fire at suitable times only, observing the strictest fire discipline, gain ground by rushes, firing right up to the enemy, maintain his position with tenacity, by making welltimed use of his supports, or gain a position by making bold attacks, well backed up by the support, and then holding it obstinately, and with every precaution taken.

"If the instruction hitherto given for dismounted service have been considered as too meager, possibly the contrary reproach might be cast upon my directions; some might say that too much is required, too many formal rules are given which could only be acted on in the drill ground. Indeed some might go so far as to maintain that all regulations for cavalry combat on foot are superfluous, as we have only to dismount before the enemy to attain what we want. Nothing of the sort; by acting thus we should be led into grievous errors, for it would be opposed to the first principles of military instruction and to the experiences of the last campaign.

"I am convinced that a complete and sufficient instruction can be given to cavalry soldiers in dismounted service without the slightest prejudice to their training as horsemen, which of course is the most important thing, and without the slightest injury to the other branches of duty, gymnastics, leaping, use of their arms, theoretic instruction, etc., which are so requisite, if we only bear in mind the matters which are absolutely necessary for real service.

"These may be summed up as follows:

"1. Thorough instruction in the use of the carbine, position, aiming, etc.

"2. The most rapid formation for dismounted combat, distribution by zugs and groups, ability to mount and form as quickly as possible, so as to use the *arme blanche*.

"3. Skillfulness in taking advantage of the ground in the attack and defense of localities, defiles, villages, borders of woods, etc., and in broken ground.

"4. Judicious leading of the zugs and groups by officers and non-commissioned officers in dispersed order, and maintenance of a good fire discipline."*

There are many instances in the war of 1870, of the use of the German cavalry dismounted, and to go even further back, we find in the regulations of the Hussar regiments 1743, Art. VII:

"The attack on foot must be practiced by Hussars, so that if they are attacked when cantoned in villages in winter, they may be able to provide for their own defense, and also may be able to force a post occupied by an enemy in a churchyard or other good position."

While providing for dismounted action, however, and, while some advanced thinkers like von Schmidt, openly advocated that their training should include such exercises, yet it was not until long after von Schmidt's time that anyone in Germany seriously thought that the dismounted action of cavalry was anything but a very exceptional use of that arm. All remained loyal to their traditions, and consequently all training was conducted upon the basis that shock action comprised the main use of cavalry, and everything else was supplementary.

All writers agree, even the German writers themselves, admit the sad deficiencies of the German cavalry in the war of 1870, and especially during the early stages of that war; it was tied too closely to the infantry and lacked that independent aggressive spirit which the modern German writers say is so essential for success, and the German cavalry owes what success it achieved in 1870, not to any particular merit of its own, but to the fact that the French cavalry committed all the errors of the Germans to an even greater degree.

Probably the main cause of the deficiencies of the German cavalry in the early stages of the war, was its lack of organization prior to mobilization, for it had, in most cases, no organization higher than the regiment. It was consequently, relatively longer in mobilizing, and when mobilized, the reserve horses and their reservist riders, required relatively much longer time to be whipped into shape than the foot soldiers; also, on

*"Instructions for Cavalry". British Translation page 192.

account of the lack of higher organization, general officers were not in touch with their brigades and divisions. The General Staff account gives very little regarding the independent cavalry during the early stages of the war, in fact little was accomplished by it, and what information was gained must be credited to the work of the divisional cavalry. But divisional cavalry cannot take the place of strategic cavalry; so at Spicheren we see the blind efforts of one German division attempting to attack in front and envelop both flanks of a position defended by three French divisions. Also, after the battles of both Spicheren and Wörth the Germans were absolutely in the dark as to the movements of the French; in fact the Prussian cavalry did not begin to make itself felt until after the crossing of the Moselle. Up to that time, it was opposed only by small bodies of divisional cavalry, whereas later, when opposed by the larger bodies of French cavalry, it began to accomplish some results. Its lack of achievement early in the war must be attributed chiefly to its lack of higher organization. The Germans themselves are alive to their former deficiencies and are seeking to amend their errors. They advocate the formation of large bodies of independent cavalry with its own artillery and technical troops which shall be far in advance of the infantry, where its first duty will be to conquer the opposing cavalry; then it will be able to keep in complete touch with the hostile infantry and send in reports of all its movements.

General von Kliest says that the strategic role of cavalry may be summed up in one word "*Exploration*." Fully realizing that the most reliable and most needed information is that which will be furnished by the independent cavalry, if it is able to properly accomplish its mission, von Kliest says:

"For what the cavalry reports, it has seen; whereas, the information coming from all other sources, agents, spies, prisoners, a study of the newspapers and of private correspondence are only hearsay reports."*

*"The Officers Patrol"—von Kliest, page 9. Taken from "The present tendency of German Cavalry" by Captain Niessel, French General Staff. M. I. D. Translation No. 1628-two, A. S. S. Library No. 10513. The Quotation from General von Kliest having been translated first into French and from the French into English may have lost something in the double translation.

In the German Field Service Regulations we find:

"Nothing but close information service, by seeking out and observing the enemy, gives certain conclusions, and especially the putting together of the reports from the greatest possible number of different points."

As a further indication of the German views of this use of cavalry the same regulations, in the article relating to the principles governing the special maneuvers of cavalry in time of peace, (Art. 568), provides: "The maneuvers of several cavalry divisions are to be devised with reference to drills in the service of security and information, performed on a large scale, under the conditions in which this work would fall to the cavalry divisions in front of armies."

The Germans differentiate very closely between the service of "Security" and that of "Information," for the most part they eliminate the former from the duties of the independent cavalry and throw it back on to the divisional or corps cavalry; General von Bernhardt, says:

"Anyone who attempted to entrust both the provision of intelligence and the protection of the troops to one and the same body of men would, in the vast majority of cases, fail to secure either purpose as long as the enemies mounted forces still held the field.

"To secure information—i. e., intelligence—requires concentration of force. The reconnoitering cavalry must beat their opponents out of the field in order to obtain opportunities for discovering what is going on behind the enemy's protective screen. To accomplish this, the cavalry must endeavor to work around the adversary's flanks, and may in consequence have to leave the front of its own army entirely uncovered. The protection of this army, on the other hand, requires a wide extension of front and consequent subdivision of force, the exact opposite of the concentration the provision of intelligence imperatively calls for."*

There are opponents to this view who claim that the cavalry duel is obsolete and that the service of security should always be kept in mind from the beginning; that the screen should

*"Cavalry in Future Wars" by Lieutenant General von Bernhardt. Translation by C. S. Goldman, page 28.

be kept complete and the exploration accomplished by means of small patrols, which avoid hostile patrols and penetrate to a point where they can observe. That in case the duel cannot be avoided, there is still the possibility to concentrate and fight. These views are more in accord with those of von Schmidt, to which we referred above. It must be remembered, however, that after a patrol has penetrated the hostile screen and gained the desired information, it must get this information back to the army or its errand is useless, and it is difficult to see how, if results are to be obtained, the cavalry duel can be avoided; also, it is clearly evident that he who has his cavalry concentrated when that duel takes place will stand much the better chances of success.

General von Bernhardi says:

"I hold it to be a grave error of judgment to believe that any systematic application of this line of action will give sufficient results.

"Advantages in war must be fought for; they cannot be filched. It stands to reason that the enemy's cavalry can only be prevented from seeing by actually driving them off the ground and depriving them of the power of breaking through our own screen.

"That a numerically and materially inferior cavalry does well to avoid action goes without saying, but fundamentally, the duty of the cavalry must be to seek to bring about collision with that of the enemy, so that from the very beginning it secures command of the ground between the two armies, and that the actual and moral superiority in the whole zone of operations between the two armies is obtained from the outset for our own cavalry."*

General von Kliest says: "Cavalry is only the eye, not the shield. The shield is only the infantry which carries it. Cavalry procures security through its information obtained."†

If we accept this theory of the strategic use of cavalry, we must accept it in toto, and therefore be willing to reduce the cav-

*"Cavalry in Future Wars"—von Bernhardi. Goldman's translation page 29.

†"The Officers Patrol"—von Kliest, page 10.

alry assigned to divisions to the minimum, thereby releasing the bulk of the cavalry to be concentrated into large masses; how large has not yet been determined, some authorities still claim that a division of six regiments, with two or three batteries of horse artillery is the largest unit capable of being handled under all circumstances; but the contrary view is more generally accepted now.

According to General von Kliest:

"A corps of two divisions is quite easy to manage, experience furnishes the proof of it. On the other hand a corps thus organized is equal to any contingency."*

General von Bernhardi would go even further; he says:

"As to the allotment of the independent cavalry divisions, it follows from all that has been said above, that to divide them in equal proportions among the several armies, according to their numerical strength, can only be considered as an obstacle to the full utilization of their potential fighting capacity. It would be better to arrange this distribution at the beginning of each war, in accordance with the conditions which the situation imposes. Where it appears expedient, we should not hesitate to form divisions of different strength, and to group several of these to constitute cavalry corps, even to unite several of such corps for employment in a particular strategical direction, i. e., in a particular portion of the theater of operation whilst leaving only individual brigades, or even regiments to those fractions of the army which for the moment can best dispense with cavalry support."†

General Pelet-Narbonne, in his "*Cavalry on Service*" refers to this subject several times and favors this use in large masses. General von Alten, in his "*Studies in Applied Tactics*," in one case assembles two divisions into a corps on one wing and leaves only a brigade on the other. In fact we may take it that General von Bernhardi's views on this point are the accepted views in Germany today, since every year at the imperial maneuvers at least two of the cavalry divisions are formed into a corps for a day or two at least.

*"The Officers Patrol"—von Kliest, page 14.

†"Cavalry in Future Wars"—von Bernhardi. Goldman's translation p. 42.

(Of course we must bear in mind that a division as above referred to means thirty-six hundred sabers, or the equivalent of three of our regiments at war strength.)

Strategic uses of cavalry, other than for exploration, are, according to Bernhardi, engaging in raids for the purpose of cutting the hostile communications or levying requisitions; used as a pursuing force to follow up a victory, or as a rear-guard to cover a retreat, and on the battlefield itself. Referring to raids, he says: "Their execution, however, will always encounter many difficulties, particularly when a hostile population has to be dealt with; but to consider them on this account as impracticable, seems to me all the more impossible, because, to my mind, they embody an absolutely indispensable element of future operations."*

Of its use on the battlefield itself, he says:

"But the hostile masses against whom we have to act, in such a case are so large that isolated squadrons, or even regiments and brigades, at least in the grand crisis of modern war; would not weigh heavily enough in the balance. They would obtain partial successes, perhaps, but to obtain results such that an army, or at all events an important portion of it should be crippled by pursuit, or itself restrained from pursuing, much larger forces are necessary. How many combat units must we put in play when it is a question of fighting? This cannot be determined theoretically. In any event one cannot see in any given tactical unit, the maximum of force to be put in play."†

Although the Germans have always scorned to study our Civil War, as being a conflict of armed mobs from which no military lessons are to be learned, a student of that war cannot but be struck by the similarity of these views with the actual handling of the cavalry during the latter part of that war. It may be that these conclusions were arrived at by contemplating what the German cavalry did not do in 1870. Of course it is also possible that, while refusing to acknowledge the source of their infor-

*"Cavalry in Future Wars"—von Bernhardi. Goldman's translation page 34.

†"Cavalry in Future Wars"—von Bernhardi. Goldman's translation page 36.

mation, the Prussians have stealthily studied our Civil War and have been influenced in their views thereby. I think it is more probable however, that they continue to scorn seeking lessons from a war of armed mobs, but that deep study and German thoroughness in searching out defects in their military system has brought them to the same conclusion in this regard, as was arrived at by our leaders in 1864 by four years of bitter, gruelling war experience. I am the more convinced of this from the fact that in the curriculum of the Service Schools considerable attention is devoted to the study of the German machine and few of the workable elements of that machine had been conceived by our army in 1862; but in 1864 we find many details of the workings of Grant's army which had been evolved by practical experience, corresponding very closely to similar details in the German military system today, details which they have worked out almost entirely by study.

The tactical uses of cavalry naturally furnish grounds for more discussion than any other, because it involves the adjustment of so many details giving rise to differences of opinion, often over very trivial points.

Since the time of Frederick the Great, however, all questions of cavalry tactics related to the mounted combat; the kind of armament, offensive and defensive; formations for combat, single, double or triple rank; the number of lines, disposition of the reserves, gaits, etc., but throughout all the horse was the main weapon and mounted combat only was considered.

Later, with the introduction of the more modern arms, the necessity was recognized of arming some of the cavalry with firearms, the proportion of the cavalry so armed gradually increased until today practically all cavalry is armed with a long range firearm, and the importance of fire action is so well recognized that cavalry tactics of the present day automatically divide the employment of cavalry into mounted and dismounted action. Some even believe that in the future the number and importance of dismounted fights will be greater than of the mounted ones.

As to the opinion in Germany, to quote General von Bernhardi again:

"Anyone who has had to conduct staff rides and similar operations of large bodies of independent cavalry, and has endeavored to carry these out in the spirit of actual warfare, can hardly have failed to notice the tendency which displays itself with all leaders to take to dismounted action, and will have realized that one has far more frequently to check rather than encourage this tendency; but he will also come to the conclusion, perhaps, that this desire is well founded on existing conditions, and that even a determined cavalry will have to make use of their firearms almost every day; indeed without adequate employment of their carbines they are no longer able to carry out the most important of their incumbent duties.

"Hence, if the use of the rifle is thus shown by instances taken from the most divergent directions to be absolutely necessary, the conclusion follows that even in the battle itself, that point on which all military action is focussed, it can hardly fail to find both its opportunities and its full justification.

"But the results obtained by the cavalry in the field practices are by no means so much behind those of the infantry that any superiority of the latter on the battlefield need be expected.

"I think that our cavalry can safely claim that they can engage the best existing Continental infantry with reasonable prospects of success, and against inferior foot soldiers may always preserve its sense of superiority. Granted this much, then the scope of our activity is enormously increased. We can now approach tasks which hitherto had to be regarded as impossible, for now we are in a position in harmony with the whole spirit of the arm, to lay principal stress upon the offensive, even when fighting on foot. We can carry through serious engagements, with chances of success which no longer depend on the favor of special circumstances.

"Although hitherto the general conception has been that cavalry should only make use of the carbine for defense, nowadays its employment in attack must be recognized as the utmost importance."^{*}

Right here, it would appear, is the solution of the rapidly changing attitude in Germany today regarding the tactics of cavalry. Shock action has been their ideal, the only tradition

^{*}"Cavalry in Future Wars" page 55.

they refused to depart from; advocates of dismounted action were found among them years ago, but the struggle for recognition was hard because the use of fire action was urged only as a defensive measure, and until recently the use of dismounted cavalry, except defensively, was not considered. Of course the cavalry of our Civil War not being considered. But now, when they discover that they can dismount cavalry and still use it offensively, the extremely bitter pill which revolted the Teutonic throat has been sugar-coated with such good effect, that Bernhardt says, as quoted above, it bids fair to become so popular that its use will have to be restrained rather than encouraged.

A glance at the armament of the principal European countries is very illuminating as illustrating their ideas on fire action for cavalry.

The German cavalry is all armed with the rifle except the Chasseurs.

The British cavalry all have rifles; they have discarded the lance except for ceremonies.

Austrian cavalry all have the carbine.

Bulgarian cavalry are all armed with the Manlicher carbine.

The Spanish cavalry all carry rifles except three platoons out of four of the lancers which still carry the lance.

French cavalry all carry the carbine, the first echelon of dragoons carry lances in addition.

Greece, Servia, Turkey, Switzerland and Sweden all carry a long range firearm.

Russia arms her cavalry not only with the rifle but the dragoons are all armed with a bayonet in addition.

The Italian cavalry all carry a rifle and bayonet.

The amount of ammunition carried by the cavalry of the different nations is as follows:

Germany, forty-five rounds, Austria fifty rounds, France forty-eight rounds, Russia fifty-eight rounds, Italy sixty rounds.

Of all European nations, France and Germany are perhaps the most backward in acknowledging the full value of dismounted action; Germany because it is contrary to her traditions and France because she regulates everything on what is done in

Germany. She watches everything that Germany does, and even as in 1870 the French had plenty of maps of German territory but none of the country west of the *Moselle*, so now the reading I have done would indicate that they are more concerned as to the opinions in Germany than they are of the opinions in France on military subjects. It would seem therefore, that we may accept von Bernhardt's statement as being very nearly the accepted view. Also General Pelet-Narbonne says: "I share entirely this opinion (uttered by von Bernhardt, that cavalry must seriously study dismounted combat) and I regard it as especially enjoined, that it be drawn up on the offensive, for the complete execution of the fire combat. General von Schmidt showed us in the last war how much work dismounted cavalry, even with the inferior firearm of that day, can find to do, provided it be led with energy."*

The views above quoted are among the mildest that are now appearing in print from European pens; many writers however are much more radical in their views; General De Negrier, in commenting on the Russo-Japanese War, says:

"The most important reports from the officers attached to the Russian and Japanese headquarters during the operations of the war are before us; and the practical unanimity of their data is exceptional. Thus our tactical studies of and deductions from these events may rest upon undisputed premises, and so escape the objections made to the apparent lessons of the South African War, it being said by some that we could learn nothing from that conflict. We have witnessed a great war, one without parallel in numbers engaged and perfection of arms employed.

"At the outset we must recognize the fact that the tactical developments indicated by the events of the South African War are not merely repeated, they are italicised.

"How many bright hopes did the friends of Russia base upon her cavalry? Why did the event bring with it such disappointment? Was there not sufficient cavalry? On the contrary, superior in number, in its mount, its technical instruction and the *esprit de corps* of its old regiments, it had a fair field before it."

*"Cavalry on Service"—Pelet-Narbonne.

"According to the doctrines accepted by all European cavalries, except the English, the Russian cavalry, dominating the terrain by its general superiority of numbers and mount, free to act as it pleased; armed with carbines and accompanied by horse artillery, had every opportunity to maintain constant contact, check the march of the hostile columns; harass convoys, cut lines of communications, and play an important part in the battle itself. The failure to meet these conditions is a matter of profound astonishment. There are two reasons for this failure, either of them a fatal defect; poor instruction in fire action and an artillery powerless against villages or field works. Notwithstanding this failure, the Russian cavalry is far ahead of that of any other Continental army. It has long since grasped the idea that, being essentially the offensive arm, an attack by firearms should be its normal mode of action, since the opportunity for mounted attack presents itself so infrequently, as to be an entirely negligible quantity. Thus all Russian cavalymen are really dragoons; but, unfortunately for them, they have not carried this idea to its logical conclusion, although the organization of the Russian cavalry is such as to enable it to do anything which may be expected of the infantry. What decisive action might it not have taken had it but been inspired by the example of Sheridan at Cedar Creek in 1864?

"The Russian cavalry, although very much superior in numbers, has had but the rarest opportunities to use the lance or the saber; since the beginning of the war, however, scarcely a day has passed without their being called upon to fight dismounted. Every squadron has had this experience several times.

"On the other side the Japanese cavalry, with rare exceptions, has always been in reach of infantry support; thus the Russian reconnaissances, being opposed by fire action, were obliged either to withdraw with their task unaccomplished, or to dismount and attempt to secure information by an offensive action on foot."

The lessons for the French cavalry to obtain from the war are in part summed up by De Negrier as follows: (Our uniform board would do well to consider his views.)

"A complete reorganization of the cavalry is imperative, the difficulties in the way of such a reorganization must be admitted. That which we call the cavalry *esprit* is quite at variance with dismounted action, which, however, is the only feasible method of action.

"The time has come for a complete change in our methods, and the cavalry, fighting on foot, should be prepared to sweep away the enemy, a result they knew very well how to achieve with their dashing gallops of other days.

"As a first step the subdivisions of the arm into cuirassiers, hussars, chasseurs, etc., should be abolished, and all should be merely cavalry. There should be no difference between regiments and the uniform should be the same for all.

"The American campaign hat, of felt, with a wide brim gives equal shelter from rain and sun, and does not interfere with prone fire. A short coat, loose trousers, shoes and leggings, permit foot movement over broken country. In place of the cloak they should carry a Mexican poncho which covers the man, is easily carried on the front of the saddle when not in use and as easily gotten at when wanted. As an arm, supply the infantry rifle, the bayonet being carried beside the saber on the right of the saddle. It is unnecessary to mention in this connection that all English cavalry are armed with the rifle it being understood that cavalry in action must act dismounted.

"As far as relates to the tactical use of cavalry, we should henceforth regard it as the means only by which a commander may converge the necessary men, cannon, and machine guns, upon a definite locality, either to deliver a blow or to parry one. Thanks to their mobility, cavalry masses should in future battles play a preponderant part. They will form the reserves which the general will hold in hand until the time comes for a tactical surprise. Taking into account the enormous fronts upon which modern battles are fought, no other arm is able to move rapidly enough to produce such an effect. Its fire bursting forth suddenly from an unexpected quarter, would change a retreat into a route; then, mounted, saber in hand, it may gather more laurels than heretofore. Its rôle, far from being restricted, is more important than ever.

"Reverting to the general rules indicated for the use of cavalry, it is agreed that the service of information can only, with good result, be entrusted to especially trained men. It requires qualities of energy, coolness, endurance and alertness, which can only be found among a few chosen from among the best. It is therefore advisable for each regiment to maintain a scouting detachment, and of these, the best will be designated to be attached, upon mobilization, to corps and army headquarters. These men must be made non-commissioned officers, reënlisted and mounted on the strongest and fastest horses to be found among the squadrons. There should be supplied each year, for this purpose, a sufficient number of thoroughbreds. The easier duty of gaining contact might be safely entrusted to ordinary patrols."*

These views are extreme, and when we consider that the author is a Frenchman we might even say ultra extreme but they have a bearing in this discussion as tending to show the trend of modern thought.

Most of the French writers agree with De Negrier as to the use of cavalry that was developed in the Boer War and the War in Manchuria, many of them, however, brush it aside with the remark that both these wars were abnormal, and refuse to recognize any deductions drawn from them as to the use of cavalry and prefer to draw their deductions at second hand from the Germans; the German cavalry, say they, is what we are going to fight, so only by study of German methods will we learn lessons of value to us.

As regards that method of reasoning Lord Roberts says, in referring to the achievements of the British cavalry in South Africa:

"It has been said that this war was abnormal, but are not all wars abnormal? As however, it was the first war in which magazine rifles were made use of, and as the weapons used in future wars are certain to be even more effective, on account of the lower trajectory and automatic mechanism about to be introduced, shall we not be very unwise if we do not profit

*Article on the Russo Japanese war, by General De Negrier of the French Army, published in the "*Revue De Deux Mondes*" January, 15th, 1906. M. I. D. Translation No. 1630-four, A. S. S. Library No. 11050.

by the lessons we were taught at such a heavy cost during that war?"*

Again Lord Roberts expresses the English view of the employment of cavalry, gained from experience in the Boer War:

"Why did our cavalry fail? Because they did not know, because they had never been required to know, how to use the principal and most powerful weapon with which they were armed.

"Because they did not understand, because they had never been asked to understand that their rôle should consist in attacking the enemy exactly like the infantry and to shoot their way up to him.

"In this matter of shooting their way up to the enemy cavalry possesses great advantages, owing to their great mobility. General French's movement at Klip Drift was essentially a rapid advance of fighting men carried out at extended intervals. It was a rapid advance of warriors who possessed the ability, by means of horses and rifles, (not swords or lances) to place their enemy *hors de combat*. It was an ideal cavalry operation, but it was not a cavalry charge as this term is generally understood, the *Arme Blanche* had nothing to say to it.

"I trust that thirty years will not again be allowed to elapse before we take to heart and act upon the lain lesson to be learned from the Boer and Russo-Japanese Wars, and in a lesser degree from every war that has taken place since the introduction of breech loading arms. The lesson is, that knee to knee close order charging is practically a thing of the past. There may be, there probably will be, mounted attacks, preferably in open order, against cavalry caught unawares or against broken infantry. But after reading Mr. Childer's book, backed by my own personal experience, I am driven to the conclusion that the only possible logical deduction from the history of late wars, is, that all attacks can now be carried out far more effectually with the rifle than with the sword.

"The two essentials of cavalry in the present day are, mobility, and the power to use the rifle to effect; unless cavalry is mobile it is practically useless. It is by saving their horses

*Introduction to Erskine Childer's book "War and the Arm Blanche" by Field-Marshal Earl Roberts, British Army.

in every possible way, and by skill in the use of the rifle, that cavalry soldiers can hope to carry out properly the many important functions required of them in advance of, at a greater distance from, and in conjunction with the main army. Further as the rifle is the weapon which will enable the cavalry to be of the most real value in coöperating with the other arms on the actual field of battle, cavalry soldiers must not only be good shots, but must be taught how to fight as infantry.

"Owing to the enormous increase in recent years in the numbers which now constitute a modern army, the strategical area in which cavalry will have to operate must inevitably be of considerable extent. Owing also to the increased size of armies on the actual battlefield and to the extended formations necessitated by the long-reaching effect of modern weapons, the strain upon the cavalry horses is infinitely greater than in former days, and unless men are taught to take every possible care of their horses, cavalry will be unable to coöperate with the other arms when their services are most urgently needed—perhaps at a critical point of the fight—or to follow up and harass a retreating enemy.

"It is impossible to overestimate the value of cavalry—trained as I should wish to see them trained—under the existing conditions of war."

These quoted opinions are not by any means universally accepted, but they show the trend of thought in Europe and indicate that the tendency of training is towards the use of cavalry as it was used by Sheridan and Stuart in our Civil War.

It is the writing of the most advanced thinkers that we see in print more often than any others, but we can also see either the result of these views, or a concurrence in them to a lesser degree in the Drill Regulations, Field Service Regulations, and system of training in general, and more particularly in the field maneuvers of the different countries.

Little reference has been made to divisional or corps cavalry because there is no task that can be assigned to it that it may not be called upon to accomplish under more difficult circumstances while serving as part of a cavalry division. Serving as part of the independent cavalry it will have to ride further

and longer, and undertake reconnaissances at a greater distance from its support; it is liable, also, to meet larger bodies of rapidly moving cavalry than when acting as part of the division, so the training suitable for independent cavalry will also be found suitable for the divisional cavalry. But the converse is not at all so, for one might as well say that twelve well trained infantry companies, collected from the four corners of the earth, constitute a well trained regiment as to say that several regiments of cavalry whose training has been limited to the work it will perform as an auxiliary arm in an infantry division collected together form a cavalry division.

Only a short time ago the War Department published a bulletin which had as its object the standardizing of the training of cavalry. While in the main, this bulletin seems to express the best thought of the day on the employment of cavalry, in fact agrees very well with the views given in the German, French and English Regulations, yet the point of view is so different, that it does not mean the same thing to us that it means to them.

Paragraph I reads as follows:

"Mounted action is the main rôle of cavalry arm and its organization, should be with a view to rendering it effective in such action.

"Dismounted action is, however, a very important rôle of cavalry, and neither an organization nor the method of instruction which fails to provide for the effective use of cavalry dismounted, will enable it to perform fully its functions in war."*

A very similar paragraph in the German Regulations means to the German, reading between the lines: "Shock action has always been a paramount tradition with us so we will let it continue so, at least on paper, but in 1870 the Prussian cavalry fell far short of what it should have been. Why? One highly important reason is that the Prussian cavalry in 1870 was not properly armed or trained for dismounted action. that kind of tactics is becoming more and more important every day and more attention must be given to dismounted tactics."

To the French that paragraph would mean: "Fire action is coming to the front. Sheridan and Stuart used it but we

*Bulletin No. 18, War Department, October 3rd, 1912.

would not accept them as a good source, without further endorsement. The British used it in the Boer War and endorse it. Its utility was proved again in the Russo-Japanese War, and finally the Germans are advocating it so we adopt it also."

To us it means: "No matter what our cavalry accomplished in the Civil War, no matter what the tactics we inherited from that war teach, the Germans have long held as a valuable tradition that shock tactics is the main thing so we will adopt it."

This bulletin contains scarcely a hint of the real *raison d'être* of cavalry today, i. e., its strategic use.

It took four years of bitter war to learn that to use cavalry as an outpost for the army was to waste a valuable auxiliary, and that massed and used independently, it could accomplish things before undreamed of.

In the years since the war our cavalry was used in the Indian Campaigns by men who learned their tactics in the Civil War. We have lost all those veterans and are rapidly losing those who learned after the war from the veterans themselves, hence the importance of deciding what our system of training for the future shall be, before the few lessons still left us from that war shall have escaped us.

There is a crying need for system in our training; much of our work is good but much of it is spasmodic, we lack thoroughness in the intermediate things. In all European countries more attention is paid to the individual instruction of the man and horse than is the case with us; of course they are not handicapped to the same extent that we are by details from the ranks cutting down the percentage present for daily instruction. Then also nearly all other services receive all their recruits for the year at the same time, making the system for recruit instruction simpler; our General Staff is now attempting to adjust our system more satisfactorily in that respect.

The most glaring defect today, it seems to me, is our drill regulations. It consists of 514 pages, including index, of which only twenty pages are devoted to the employment of cavalry. This book presents a very formidable appearance to a non-commissioned officer or to a Second Lieutenant who has to be examined in it during the Garrison School Course, but it has

only twenty pages devoted to what cavalry will actually have to do in time of war; the remainder of the book is filled with close-order drills, trumpet calls, ceremonies, individual training and equitation; much of the latter being obsolete and some of it even absolutely opposed to the latest ideas on the subject as taught at the Mounted Service Schools.

These Drill Regulations have been carefully revised every few years, the position of "*carry arms*" omitted and "*left shoulder arms*" substituted; in the latest edition, the word "*carbine*" was replaced by the word "*rifle*" and a few more equally important changes made, otherwise it contains much of the excellence of other days. In many respects it is still an excellent work, its defects lie in its length and lack of simplicity.

If one attempts to attain perfection in all the movements prescribed therein, all the time available is consumed without attempting to evolve anything practical from that greatly condensed twenty pages on the employment of cavalry, the older officers have no ambition left to devote to something that really counts, and the younger officers never get beyond the musical saber manual as their ideal of perfection in cavalry exploits.

Our present drill regulations are too great a tax on the memory, much of our close order drill is a mere matter of discipline, and could be wiped out without any bad results. Only such movements should be retained as would be used in maneuvering. A more frequent use of ceremonies could be taken advantage of if considered necessary for discipline.

The following command is a fair example of how our Drill Regulations is cluttered up with a lot of useless material which befogs the mind and is unnecessary, "*Pass in Review, Column of Platoons, First Troop, First Squadron, Forward, Guide Right, Column Right, MARCH.*" Very impressive for the uninitiated but if a colonel should get two of the words mixed, he would probably be so mortified that he would immediately apply for a detail as inspector general. In one regiment in which I have served, a very versatile Chief Trumpeter composed trumpet calls for all those long commands and regimental drill resembled a Band Concert.

As a model for a drill book, "*Cavalry Training*," British Army 1907, seems to be excellently well proportioned; it seems to cover everything contained in our drill regulations and is less formidable in appearance; it has 210 pages which are divided as follows:

Principles of training	20 pages.
Training of the individual on foot	20 pages.
Equitation, embracing training the recruit, training the young horse, and active and passive riding	20 pages.
Employment of cavalry in the field, embracing general principles; the strategical and tactical action of cavalry; the independent or strategical cavalry, protective cavalry, divisional cavalry, its coöperation with other arms on the battlefield and miscellaneous duties	65 pages.

The remaining thirty-five pages are devoted to ceremonials, instruction in the use of the sword and lance, castrametation, etc.

A comparison of the old Infantry Drill Regulations with the new would give a very good idea of the difference between what we have and what we should have for the cavalry. Since we have no fixed system of training there is little check on anyone from the individual captains through all the grades to the War Department itself, the higher up you go the less check there is, and individual hobbies are bound to creep in, of course the higher up they originate the more wide spread is their effect.

No one will deny that many, possibly all of these so-called "*hobbies*" concern matters of importance each in its proper place and become objectionable only when they are given undue importance, thereby minimizing the importance of some thing or things equally or possibly more important.

A well organized system of training would furnish the check which would reduce to a minimum the friction caused by the personnel in all grades from the Chief of Staff down to the captains.

Many of the defects in our training have been pointed out from time to time and fully discussed, I shall only mention a few of those which to my mind are in most need of immediate correction.

One is our method of conducting target practice. According to our method of devoting about three months of the year to target practice, undoubtedly excellent results have been obtained, according to the target reports, but anyone who has experimented with firing in the winter, knows that those results are very deceptive. To be sure it may be necessary to have a season of systematic instruction for recruits. But after that it would be much better to have some firing at regular periods during the year and not use up three months of the best season of the year to obtain results which are altogether out of proportion to what we could obtain under the best of conditions.

Our present system of target practice, however much allowance we may make for the changed conditions, lead us to hope for results in war which cannot possible be realized. It would be as reasonable to devote a certain period of the year to mounted instruction and then turn the horses out to grass for the remainder of the year.

Note the difference in the French method. With them, firing is conducted once a week beginning with the second month of recruit instruction and kept up during the entire year. Each man fires six rounds each time making about 300 rounds per year.

So many excellent articles have been written recently on the subject of horse training that I should hesitate to even mention it in the few lines that can be devoted to it in this paper, but its importance is so great that it cannot be omitted. The Germans train their remounts about two years before they are put in the ranks but General von Bernhardt thinks this time can be reduced. He says: "Owing to the better bred and generally improved class of remounts nowadays obtainable, the period of training can be considerably curtailed, while on the other hand, a higher standard of training may be demanded of the horse."*

"The principle that *only thoroughly trained horses may be placed in the ranks*, must, to my thinking, be carried out quite unconditionally. It forms the necessary foundation upon which alone we can build with success.

*"Cavalry in Peace and War" by von Berndardi, 1910. Translated by Major Bridges, 4th (Irish) Dragoon Guards, page 257.

"The essence of the training is to continually improve upon the individual training of the horse. Efficiency in the squad must be the result of good individual training. Even after the conclusion of this course this must be remembered, and continual care taken to check any inclination to tricks, excitability, or stubbornness that may show itself, exercises in independent riding and leaving the ranks should therefore be frequently repeated; it is thus that the existence of any faults of breaking can best be detected, for it is only a thoroughly trained horse that will submit himself completely to the riders will."*

The usual practice with us in the past has been, as soon as a remount becomes sufficiently tractable to be ridden without danger of its attempting to unseat its rider, to put it in ranks and take it out to drill with the troop.

If the horse is not too warm blooded, he may, under this treatment, turn out to be an average mount, but many times he develops into either a plug or an outlaw.

I once heard an Irish sergeant say: "A lot of this recruit drill is tommy rot, the way to teach a recruit to ride is to put him on a horse and let him catch on." That Irishman was an excellent drill sergeant; he could whip recruits into shape quicker than any other man I ever knew, that is those of them who did not desert.

Our manner of training horses has often been too much like the way the Irish sergeant trained recruits, but the horses cannot desert, and the only wonder is that more of them have not been condemned while young, and that we have not worse mounts than we have today.

In many regiments systematic training is now being given our remounts under a well qualified officer, but there is no universal rule in that regard and a system is more needed now than heretofore since we began to get younger horses through our remount depots.

Under the French system, suppling and instruction of young horses is carried on in the regiments by non-commissioned officers and selected privates under an officer; it lasts two years before a remount is put in ranks.

*"Cavalry in Peace and War"—von Bernhardi.

The French system of cavalry training is so thorough and in many respects so good that a few other points from them are submitted for comparison with our lack of system.*

The French devote an hour per day to instruction in vaulting and gymnastics during recruit instruction, and three hours per week during the remainder of the year.

Fencing is carried on every day, dismounted and mounted. The instruction of scouts and guides takes place once a week and lasts two hours. In each troop there are twenty-four scouts, six to each platoon, and all wear a five pointed star of red cloth sewed on the sleeve. The men so distinguished show great pride in it as attributing to them a greater degree of intelligence, although they enjoy no material benefits from it. There is great rivalry among them to obtain the distinction.

For the instruction of officers, among other things, *Map Maneuvers* are held twice a month in winter, the remainder of the year tactical rides or walks are held at which non-commissioned officers are present as spectators.

In August and September are held the maneuvers which last thirty-six days and include three periods, as follows: Cavalry evolutions; combat firing; and, maneuvers with the infantry.

As to the training of our officers, I believe we are on the right road. Our Service Schools are inculcating the desire for study which will have its results. It is to be hoped that the time soon will come when the majority of our captains and all officers above that grade are graduates of the School of the Line, and a great many of them also of the Mounted Service School.

Not enough attention however is spent by us on the instruction of scouts and guides. General De Negrier, in a recent article says of its importance:

"Reconnaissance can be made only by very small groups of troopers, especially prepared and trained. They will have to be mounted on horses of exceptional endurance, and will have to

*Taken from "Notes on the training of the French Cavalry" made by Captain Teodoro De Iradier, Spanish Cavalry during nine months service with the 10th French Chasseurs, "Rivista Di Cavalerie" July and September 1910. M. I. D. Translation No. 2325-two. Index No. A. S. S. Library, 12556.

be accustomed to orienting themselves by day and night. As training, they will be drilled at the maneuvers in crossing the line of outposts without being seen. They will penetrate the zone of the march of the enemy and will observe his movements.

"Such were the scouts of Stuart and Sheridan in the War of Secession in the United States. This service was performed by picked volunteers, who were all young, well trained, indefatigable horsemen who had given proof of intelligence and bravery. They were few in number, and when they went out were accompanied by one or two troopers only, who were chosen, like themselves, for their intrepidity and *sang froid*. In the maneuvers we are accustomed to have this service performed by officers patrols, and it is not rare to see a regiment of cavalry detach three or even four officers for this purpose. It is easy to foresee what would be the consequence of such a system at the end of two or three months campaigning.

"The officers patrol should be employed only to obtain information of a special character, which the Chief may need at a certain moment and in a minimum of time. Immediately upon obtaining the information, the officer himself comes to communicate it to the chief who sent him.

"A scout's service, on the contrary, should be constant. It is therefore necessary for each regiment to have a certain number of scouts so they can relieve one another.

"This service demands peculiar faculties. They may be found by minute selection, whether or not the subject chosen possesses them all, can be found out by war alone, but as this selection should first be made in time of peace, with what care the picked subjects must be trained and prepared.

"What precedes, leads to the creation, in each regiment of cavalry, of eight non-commissioned officer scouts. Their training will be confided to a captain as instructor. To each of these scouts will be assigned two blooded horses of proved endurance, a corporal or a trooper who is a student scout will be attached to each of them. It would take too long to indicate here the details of their preparation, suffice it to point out the spirit of it.

"A characteristic feature of their training would be the reconnoitering of the maneuvers executed by neighboring garrisons by day or night."*

The best and most advanced training we can get, however, is in field exercises and maneuvers, but until the preliminary training has progressed to a certain degree of proficiency, such exercises serve no valuable purpose. Whether or not we have progressed to a point where maneuvers are beneficial, may be a question, but assuming that we have reached that point, how much do we of the cavalry get from our maneuvers?

A few years ago I was present at a maneuver camp where there were in attendance more mounted troops than infantry. In one problem in particular, the infantry on one side had marched about twenty miles by noon and had not fired a shot, most of it had not even deployed, when the recall was sounded. There were some very drastic comments made at the discussion that evening, by a captain who commanded a battalion of that infantry. He said that not only had the infantry gained no good from that problem, but that it was the cause of so much discontent and grumbling as to have been a positive detriment. His remarks seemed then to be rather peevish for, from a cavalry point of view, the problem had been a very interesting one. However, it was solved the moment the infantry arrived and I can now see that his remarks were not only pertinent, but justifiable. His view was the sensible one to take, for it is not only impossible to obtain satisfactory results, but it is worse than useless to work out abnormal situations.

It seldom happens that our maneuver camps are composed of the proper proportion of the different arms, the governing factor being, rather, to get together all the troops that can be conveniently collected no matter to what arm they belong, and the result is that unusual situations are worked out and erroneous lessons learned. In the case noted there was, of course, an exceptionally disproportionate distribution of troops, and therefore, a good one to illustrate the point. In the ordinary case, the situation is drawn up to be as nearly a suitable one from an infantry point of view as possible and that is as it should be for infantry maneuvers, but the superfluity of mounted

*M. I. D. Translation No. 2072-two, A. S. S. Library No. 12372.

troops in not ordinarily so great as to entirely spoil the game for the infantry, as it did in the case noted. The great danger is that erroneous lessons may be learned, although they may not be recognized as such and the cavalry, instead of learning its work as strategic cavalry, is learning things as auxiliary cavalry which it will have to unlearn when the time comes to perform those duties in war.

In order to learn in time of peace the real rôle of cavalry, that is its employment as *strategic cavalry*, we should have our own maneuvers where as large bodies of cavalry as possible, with the proper proportion of the auxiliary arms, can be collected for maneuvers and independent of the infantry.

Of course the proper proportion of cavalry should still be detailed for duty at the infantry maneuvers, and occasionally it might be instructive for a cavalry division, or as nearly a division as can be assembled, to be engaged in a maneuver campaign against an infantry division. Even one-sided problems with an imaginary or an outlined enemy are instructive. Better still, however, is to have two opposing bodies of cavalry, each with its proper proportion of artillery, which will give some idea of how cavalry will be used in war. It is not believed that a proper conception of the strategic use of cavalry can be obtained in any other way.

Congress has said that a captain cannot learn how to command a company, troop or battery, unless he spends one-third of his time actually in command of one; he cannot learn even by watching an organization drill from the window of the Adjutant's office. Is it any easier to learn how to command a brigade or a division than a company or troop? Unless we can assemble such units, how can we expect to be able to find anyone able to command them when the need arises? If you place a bright intelligent recruit on a well-bred, intelligent, but untrained horse and send him out to make a road sketch you will not look for very brilliant results, yet the best cavalry division we could mobilize today would be about as well equipped to perform a strategic mission as is that recruit to make a road sketch.

No mention has been made herein, or suggestion offered, looking toward any legislative action. In fact I can think of

but two things requiring legislative action which would greatly improve the training of our cavalry, these are:

First.—To keep the personnel at war strength.

Second.—To permanently organize our cavalry into complete brigades or divisions, which ever may be determined to be the better administration unit, each with its administrative staff and system of supply completely organized, and with a proper proportion of auxiliary troops permanently assigned.

Changes in these two particulars, while they present possibilities for a very great improvement, still are not vital, relatively. When we consider our military establishment as a whole, much can be accomplished if we systematize, and until we do all we can without the assistance of Congress, we have no warrant to ask for legislation.

The majority of the European nations have their cavalry divisions completely organized. Germany is the only exception which has, so far, only organized one, the cavalry division of the guards. The organization into divisions is strongly advised in Germany. Von Bernhardt alone is opposed to it. He, however, wishes the staffs organized and trained, and the corps staffs as well. He also wishes the trains and impedimenta stored and ready, so, as they are assembled every year for maneuvers, what he advocates amounts practically to a complete organization while at the same time permitting a certain flexibility in the composition of the higher units, depending upon the strategic situation which presents itself when the necessity for mobilization arises.

It must be noticed however that Germany keeps her cavalry at war strength and the enlisted personnel serves with the colors for three years. When the service with the colors was reduced about ten years ago for infantry from three to two years, Germany kept to the three year term of service with the colors for all mounted troops.

The French troops all serve two years with the colors, but General Maitrot, Colonel Aubier and others strongly advocate a three years term for the cavalry. General De Negrier strongly laments that only two years are allowed for making a cavalry soldier.

In this respect then, although Germany has a great advantage over us, her troops being at war strength, we are not as badly handicapped as are the French who have only two years service. Yet, if we are to credit the reports of our officers abroad, the French cavalry rides better than do ours. This is undoubtedly partly due to their better class of mounts, but I think we must be honest and attribute the excellence essentially to the better and more systematic methods of instruction and training.

The conclusions reached in this paper are:

That we are badly in need of more system in our cavalry training, and the first step is to determine how it is to be used and coördinate all our energies along those lines.

Next we must revise the Drill Regulations, making of it a book that will give some inkling of the use of cavalry other than as an adjunct to county fairs.

This accomplished, we can adjust our training along more useful lines, especially standardizing the individual training of the recruit, the remount, scouts and guides, and officers.

Systematizing the holding of field exercises and maneuvers for cavalry independently of the infantry exercises.

Provisionally organizing units as large as any we contemplate assembling in time of war for the purpose of giving our general officers practice in handling, and the troops the experience in working out the problems that will confront strategic cavalry.

When we shall have accomplished all we can along these lines, we can then go to Congress with clean skirts and ask for what legislation we need for our further improvement. Unless I am very much mistaken, when that time comes, we will find that our needs are very limited so far as concerns our present strength.



THE CAVALRY HORSE AND ITS BREEDING.

BY CAPTAIN A. H. WADDELL.

(From THE FIELD of September 6, 1913.)

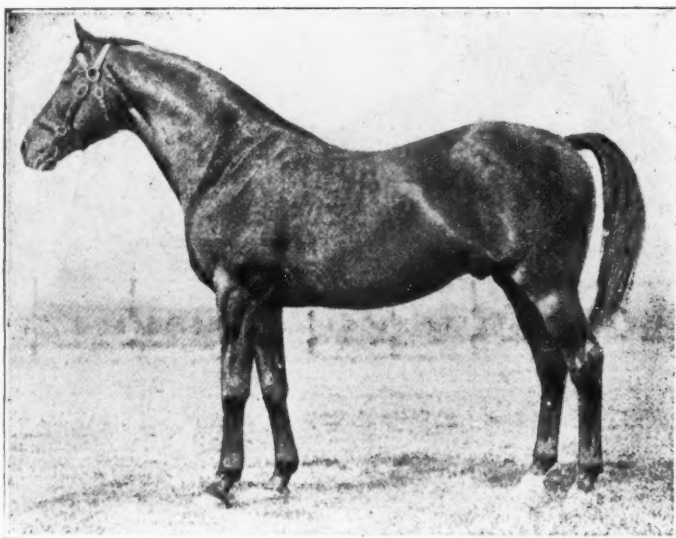
IN view of what we see in regard to stallions chosen as suitable to get army horses and being decorated with the blue ribbon for such purposes at the horse shows, it is clearly evident that the judges who pick such horses as hackneys, trotters and Morgans for such sires, know absolutely nothing about the cavalry horse, his uses or requirements. Have any of these men ever had anything to do with army matters? Have they ever seen a squadron, let alone a brigade of modern cavalry in their lives? Have they ever seen a "gallop-past" at the speed at which it is insisted upon by the great cavalry generals of the day? They can have no possible idea that to be efficient today, cavalry must be as fast as thoroughbred blood can make it and as mobile as this speed can avail.

The thoroughbred is the fastest animal that breaths today, and besides that can stand greater hardships on poorer food and greater privations under the most adverse climatic influences than any breed of horse whatsoever. All the great fighting nations of the world know this, and each would only be too glad to have all their cavalry mounted on clean thoroughbreds faster than any other power, if they could. This, however, is impossible, and being so, they are all endeavoring to breed the fastest they can; and will anybody tell me that nations like England, France, Germany and Japan are racking their brains

to find out which is the best—hackney, trotter or Morgan stallion—to accomplish this end? Neither the hackney, the trotter nor the Morgan can gallop as fast as a man can kick his hat; what use, therefore, can such animals be, as sires for the purpose in question?

It is pathetic to see such ignorance, and lamentable to hear and read the excuses for such action.

What would a real American cavalry officer of today think of hackney bred troopers in his command? What would French have been able to accomplish in South Africa with animals of



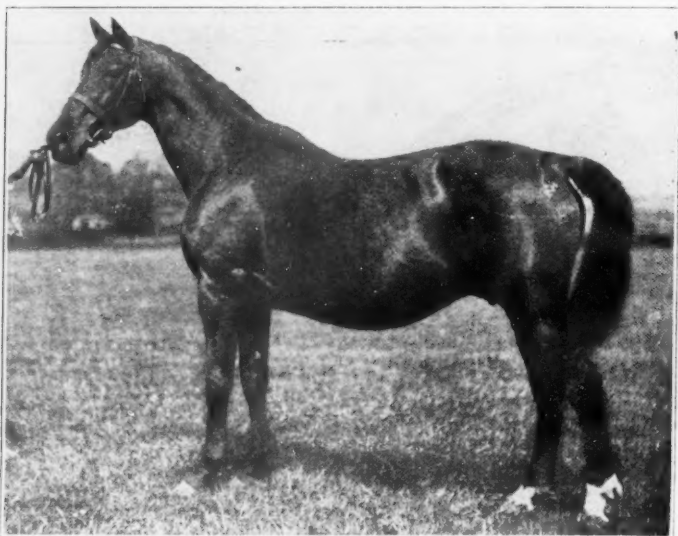
CUT No. 1.

A great Thoroughbred stallion with size, bone, body and substance—an ideal cavalry horse sire.

this breed? What would Lord Roberts have said had the British Government given him hackney, trotter or Morgan bred horses to accomplish his wonderful march from Cabul to Kandaha? Lord Roberts—plain Frederick then—cleared the road with light Indian cavalry on Arabs, Turcomans, Beluchies, and other breeds in which the Arab blood predominated, and rode an Arab himself, and British cavalry mounted on well bred Walers.

While I do not regard the Arab as the greatest cavalry horse for modern warfare today, for those days, for that country, and for those requirements he could not possibly be beaten, considering the light weight he had to carry, and no thoroughbreds available. The Arab, though absolutely slow as compared with the thoroughbred, is an express train as compared with a hackney, a trotter or a Morgan.

I have had a good deal to do with the remount department of the British Army in the days that are gone, and that in many

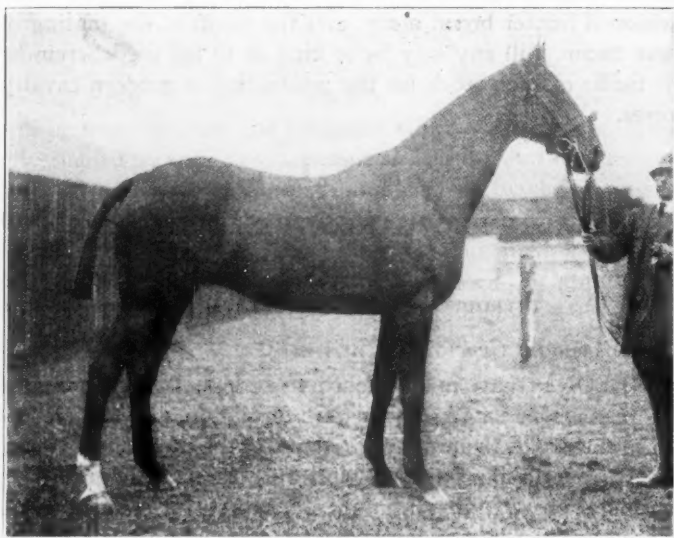


CUT No. 2.

A typical hunter Broodmare—one of the great, big roomy kind with power and substance all over her but still showing a great deal of quality and breeding—the cavalry horse dam par excellence.

parts of the British Empire, and the one thing, of all others, that produces more choice Old English blasphemy, from commanding officers and the generals of the army, in the lack of speed and action, or at "the gallop past" at a review. I have heard the old Duke of Cambridge swear till all around was blue, at cavalry going past at "the charge," too slowly to suit him; and I thought that General Sir Drury Low, who galloped

his cavalry from Ismalia to Cairo in such wonderful time and captured Arabi Pasha, after the battle of Tel-el-Kibir, would have gone crazy in his anger at the slowness of a "gallop past" of the cavalry brigade in the Long Valley at Aldershot, years ago, although the horses were the best bred ones that the government could buy and were galloping for all they were worth. That was twenty years ago, and since that time the British Government has been trying to make its cavalry faster and faster, and the French and Germans trying to outpace them.



CUT No. 3.

The result of the mating of the above—a great upstanding Gelding of splendid individuality that can gallop fast, carry weight and stay—the cavalry horse that all the great fighting nations are trying to breed.

On top of this and after it had been so thoroughly proven by these powers, that cavalry horses must be as well bred as possible, if not thoroughbred itself, we are told by Americans, the most progressive, up-to-date and go-ahead people on the face of the earth, to breed cavalry horses from hackneys, trotters and Morgans. Great Scott! it would take 100 years to breed the trotting gait out of the hackney or trotter, and then it would

not be eradicated, and having accomplished so much, neither of them would be able to gallop fast enough to get out of their own way, while the Morgan, good and useful little horse as he is, but that can neither trot nor gallop fast naturally, would, never, this side of eternity, be worth his hide as a cavalry horse.

"For the sake o' man's repute," let us see a little more common sense displayed in judging the army classes at our horse shows.

The three pictures accompanying this article, show a great big thoroughbred stallion worth calling a stud horse; an old fashioned hunter brood mare; and the result of the mating of these twain, will anybody be so kind as to tell us, wherein lie the faults of such stock for the production of modern cavalry horses.

CAVALRY REORGANIZATION, DRILL, ETC.*

INTRODUCTION TO CAVALRY TACTICS.

To the Adjutant General, U. S. Army;

I REPORT that, in obedience to orders, I have prepared regulations for the instruction, formation, and movements of the cavalry of the army and volunteers of the United States.

In undertaking this important work I was led to give much consideration to a growing military impression in favor of an important change to a *single rank* formation.

Whilst the conservatism or prejudices of European establishments have slowly yielded, in the infantry arm, to the extent of reducing its formation from six to two ranks, the one great step from two to one rank in cavalry has not yet been made; but it was tested very successfully in the war in Portugal in 1833-34 in a British legion. I found that it greatly simplified all cavalry movements; a great recommendation—but especi-

*This and the articles which follow are reprints gathered from various sources, as noted under each, and which have been furnished us as being peculiarly *apropos* at the present time when these questions are being seriously considered by the Cavalry Board and others. The spelling, although incorrect in several instances, is as in the original text.—Editor.

ally in view of our national policy; it would go far toward lessening the difficulties, by many considered insuperable, of the efficient instruction of volunteer cavalry in a period of actual war.

Prejudices of my own against the change were overcome.

Adopting, then, the single rank formation, my work of revision became one of construction; and I have freely chosen what I judged to be the best points in the systems of France, Russia, Prussia, Austria, and England. I have added to all. The work will be found to amplify the old range of movements, whilst its simplicity renders it less voluminous.

In the decisive action of cavalry the rear rank, *under another name*, will be screened from much of the enemy's fire; will be reserved from the confusion which even success throws into the front rank; but that rank *defeated*, it not only escapes being involved, but is close at hand to profit by the impression which may have been made on the enemy.

My confidence in a single rank system is further strengthened by its recommendation in the able work of Captain Geo. B. McClellan, and by which I have been much assisted.

Respectfully,

P. ST. GEO. COOKE,

Colonel Second Dragoons.

TWO LETTERS FROM MAJOR GENERAL FITZHUGH LEE.*

Baltimore, February 27, 1868.

Colonel:

I have the honor to acknowledge the receipt of yours of the 18th of January.

Pray accept as an excuse for delay in responding, the fact, that I was not at home when your letter arrived, but that it has followed me about from place to place and only within the past few days, been received.

My time is so limited this morning I can only reply briefly to your questions, with the idea that reaching you earlier, they

*From Denison's "Modern Cavalry."

would be more welcome than more extended response at a later period.

First you ask the best arm for cavalry?

I reply, Colt's navy-sized revolver, Sharp's breech-loading carbine, and the French saber.

"The best method of fighting cavalry at present, whether mounted or dismounted against the other arms?"

I conceive it depends entirely upon the nature of the country.

"The best saddle for cavalry?"

I think there is no comparison between what is known in this country as the "McClellan Saddle," and any other.

"Whether the rank entire system is better than the double rank?"

My experience in the old United States army as in the service of the Confederate States is decidedly in favor of the latter. You can *never get ground sufficient to manuever large bodies* of cavalry by the single rank system, and in charging by platoon, company or squadron front, the advantages of the single rank can always be obtained by directing the rear rank to hold their horses back a little until the interval is attained.

I have no objection, Sir, to your using what I have so hastily and incompletely written in any way you may deem proper. I regret to have written so briefly, but if you will address me, on reception of this, to Box 301, Alexandria, Va., I promise to take time to give you my views upon the use of cavalry and the best means to make it effective in battle.

Yours most truly,

FITZHUGH LEE,

Major General Commanding Cavalry Army
N. Va., during late war.

Colonel G. DENISON.

Richland, Stafford County, Va., April 30, 1868.

Colonel:

I have the honor to acknowledge the receipt of your letter in which you request my opinion on any points connected with the cavalry service as may strike me, and in reply, the following views are submitted.

In all countries the squadron is the unit of the arm of cavalry, though in itself containing subdivisions for greater convenience in handling. Mount sixty-four, light, active young men who are good riders, upon supple, well ribbed-up, round-barrelled, short-coupled, spirited though docile horses, not as a general thing over fifteen hands high, and you have the essential conditions of good cavalry. The number, sixty-four, of course varies always in proportion to the number of men for duty. I only give it as a good average. For rapidity of motion and facility in maneuvering keep the squadrons small and give "plenty of elbow-room." In the American service such a unit is composed of two companies, and the whole subdivided equally at each formation into four platoons. A company of cavalry in the regular service is officered with a captain, one first lieutenant, one second lieutenant, which would give six officers for the squadron, a leader, a file closer, and a commander for each platoon.

I eschew heavy cavalry, the "cuirassier" *sans peur*, they can only be employed during actual conflict, and in this country, from its topographical features, opportunities seldom occur for charging with large masses of cavalry, like Murat and Bessieres at Eylau, or Seidlitz at Zorndoff for instance; so seldom indeed, that the expense does not justify keeping up such organizations whilst awaiting such opportunities. I participated in every battle fought between the two principal armies in Virginia during the late war between the North and South, and cannot recall a single instance where cavalry *en masse* was employed on the battlefield, save in a few instances against cavalry itself. Raiding, scouting, reconnoitering, etc., "heavy men mounted on heavy horses" are unfit for, and hence their disorganization and disuse. The dragoon, that admixture of "foot and horse," and like all hybrids possessing the qualities of neither to any degree, has also disappeared among us, and now light cavalry alone is recognized. It was found that it too could be made very effective on foot, when occasion required, its light armament affording facility for the rapid transition. Though cavalry ranks as the second *tactical* arm on the field, its duties before and after battle have become very great; when it can be used during conflict, it must be led with celerity and boldness and even, when called for, *recklessness*.

The average weight of a light dragoon in the English service some years ago (I do not know how it is now) was 10 stone 3 pounds, or 143 pounds, and his height from five feet four and one-half inches to five feet eight inches. The average weight of his equipment was 103 pounds, which would make the horse carry 246 pounds, *too much weight*. The equipments in the United States service are much lighter, which would allow the man to be heavier, but the total weight I should prefer to come below 200 pounds.

As a general thing *young* men make the best cavalry (though I do not forget that Cromwell was forty-four years old when he first drew a sword, nor deny his great cavalry genius); they possess more enthusiasm, cheerfulness, dash, greater fondness for riding, are more careless of life, always eager for enterprise, and will ride more recklessly when occasion demands. To such traits intelligence must be added, for the trooper is so often detached and must think for himself. His duties as vidette, courier, orderly, member of patrol and reconnoitering party, all demand the exercise of it. Cavalry, too, cannot be improvised to the extent infantry can, but requires a long training of man and horse before made effective.

Good horsemanship is the basis of a good organization. I do not think your schools in Europe pay sufficient attention to riding; at West Point, the military school of this country, requisite particularity I know is not exercised. No officer should be admitted to the cavalry arm of the service who does not become a good horseman, and evince a partiality for all pertaining to the animal. Without the first quality, a desire to lead his troops when moving at a rapid rate, and where obstacles intervene, is apt not to exist; and the absence of the second interferes with a bestowal of attention to the comforts, appetites, and health of his horses. Whilst on duty at West Point (just previous to the breaking out of the late war) as instructor of cavalry, I noticed that in a class where there were two cadets who had never been on horseback in their lives (and there were frequent instances of that kind among young men from the Northern States), one would early assume a good seat, and in time become an excellent rider, whilst the other never could learn; he would go mechanically through the drill, but to

his graduating day he always looked awkward, unsafe, and uncomfortable on a horse; still, if he stood high in his other studies and got few demerits, his chances to be put into the cavalry upon graduating, were he disposed to urge them, would be better than anyone who stood below him in class rank, though higher in the theory and practice of that arm. The defects of the system are manifest. I would recommend, too, the getting rid of all troopers who cannot be taught to ride, either by discharge or transfer to other arms. It will save many sore backs to horses and much useless time and drill in trying to get such up to the proper standard. A proper instructor can tell, after seeing a squad ride for a few days, who are going to become horsemen and who never will. The system in the United States is to recruit men by voluntary enlistment (wherever they can be found) for the mounted corps, certain conditions as to age and health being fulfilled. They are then sent to Carlisle, taught to saddle and unsaddle a horse according to prescribed forms, mount and dismount, with a little insight into the elements of tactics, after which they are drafted to the different regiments as required. You can see the defects of such a system which will permeate through the whole country. Height and weight should be consulted, with the thinning out of bad horsemen after they are found to be so, and more perfect training given them. Above all perfect them in managing a horse at speed (which seems now never to be thought of), first shaking them into good seats by long preliminary trots day after day. How helpless a man feels when riding a horse at full speed for the first time, and how little like using the weapons fastened to him! Can he take care of himself in the *mêlées* that charges so often resolve themselves into?

I favor the double rank in preference to the rank entire system for many reasons, and among them the following: "More men can be maneuvered on a given piece of ground, particularly in line formations—an important object to achieve—for ground is always scarce for cavalry purposes. The efficiency of a cavalry charge lies in its shock, the rear rank augments that, fills up the gaps and in the *mêlée* that succeeds gives more sabers on hand for service. It also carries confidence to the front rank as such close backers will. Instruction

should be given them to rein back a little in the charge though, to prevent riding over their file leaders should they or their horses fall. The principal objection to charging with single rank formation is that after the charge when the usual spreading out takes place, it is scattered too much for its own strength; another, that all men and horses, however good the cavalry, are not fit to lead. The experience of nations who have tried such a system are not favorable to it, even the Cossacks have abandoned it. Our own in the past war was decidedly against it, after a fair test. Several regiments were maneuvered entirely by the "rank entire" system until practice proved its inadmissibility. I know that the Duke of Wellington, as well as such experienced cavalry officers of the same epoch as your General Bacon, Lord William Russell, and Lieutenant General Sir Henry Vivian recommended the adoption of the "rank entire" system, but I doubt whether in practice it attained the expectations they formed of it from theory.

As to the equipment of cavalry, I would arm the trooper with the Sharpe breech-loading carbine and sling, Colt's navy-size revolver, worn in holster on belt around his body, and the light French cavalry saber. The lance was amply tested in our late war, but did not answer, and was abandoned as an arm for cavalry. For a saddle I prefer above all others what is known in this country as the "McClellan pattern" being the result of the observations in that particular by General George B. McClellan whilst in Europe as one of three officers sent there by Honorable Jefferson Davis (when Secretary of War) in April, 1855. It is lighter, more durable, stands exposure to weather better, and is more comfortable to man and horse. In the pouches on either side the soldier ought to carry currycomb and brush, two spare horseshoes and necessary nails, a change of underclothing, soap, brush and comb, and towel, strapped behind the saddle he carries, rolled up in an oil cloth covering, his overcoat and blanket. The felt pad, so highly recommended by Captain Nolan, Fifteenth Hussars, in his very valuable work on cavalry, which always accompanies his saddle, I cannot recommend. I tried one myself when an officer in cavalry in the United States army previous to the war. It did not answer on long scouts in hot weather. The perspiration absorbed from the horse drying would make it too hard, and as a consequence

chafe the animal's back, besides being very hot and uncomfortable to him whilst on the march; I know nothing superior to the common saddle-blanket. Valises with the letter of troop upon them and shabraques have been discarded with us, also wallets and saddle holsters, as tending by the weight of their contents to produce that very troublesome and common disease known as "fistulous withers." For a bridle I recommend a light, but strong and well-finished headstall, the bit to buckle on to the two lower rings by straps attached to it, a halter strap to buckle to the ring under the throat, and on the march the other end to be tied to a ring in front of saddle; unbuckle the short straps, take the bit out of the horse's mouth, untie the halter strap from the saddle, and your horse is ready to be secured. The reins of course go with the bit. I prefer only one rein, as less cumbersome and more simple. The bit to be moderately powerful, with the cheeks rather long to give sufficient leverage. Everything depends upon the biting a horse first receives whether he is to have a hard or a soft mouth, and great care should be taken lest you make him restive and sensitive by an injudicious use of the stiff bit. The Cossacks use nothing but the simple snaffle, whilst the Turk and Arab use bits so powerful as to break the jaw of the horse if suddenly and violently checked. Hence I say it is not so much the bit you put in a horse's mouth, as the manner in which you teach him to obey it, for can anyone deny the horsemanship of the Cossack or Arab, and yet what different means they employ to control their steeds.

For the rest, I remark in conclusion, that to have good cavalry, you must have it well officered, for it is more dependent upon the example and bearing of its leaders than any other arm. General Foy, you know, in his history of the Peninsular War says: "*Après les qualités nécessaires au commandant-en-chef, le talent de guerre le plus sublime est celui du général de cavalerie. Eussiez-vous un coup-d'oeil plus rapide et un éclat de détermination plus soudain que le coursier emporté au galop ce n'est rien si vous ne joignez la vigueur de la jeunesse, des bons yeux, une voix retentissante, l'adresse d'un athlète et l'agilité d'un centaure.*" And when we consider that cavalry is the most difficult and delicate of all arms to handle on the field of battle, I don't think the General's opinion is so exaggerated.

As to its strength, military authorities put it down from one-fourth to one-sixth of the infantry in the same army, though its numbers ought to vary with the nature of the country and strength of the enemy's cavalry. On the field of battle it should generally be employed on the flanks of the army, though ready to be moved to any point favorable for its action.

Cavalry has been very properly termed "the eyes, ears, feeler and feeder of an army," a sentence comprising a great deal. Upon the information gained by it the movements of the whole army are based, and the proper forced reconnaissance with an intelligent secret system, demand the utmost attention on the part of the leader. My own experience taught me to select a small body of men taken from the regiments in which they could be found, who were denominated "headquarter scouts." These men were noted for their daring, intelligence, truthfulness and knowledge of the country; they hovered in squads of two or three on the flanks, front, rear and within the lines of the enemy, and promptly and accurately reported his every movement. I would not recommend that they be put under any officer, but be ordered to report to the chief of cavalry direct, or when it was more convenient, and the information was very important, to the chief of an army corps, or the commanding general first. Subordinate officers to have nothing to do with them, as only tending to delay the transmission of their intelligence by causing it to come through them. I found that twenty-five resolute men, scattered in the way I have described, could always keep me supplied with much necessary information. They were made to see for themselves and not report what citizens might tell them they had seen; were always made to dress in the uniform of their command, and pains were taken to keep them well mounted.

And now I bring this to a close, not wishing longer to delay its transmission, lest you think my promise had not been complied with. If anything I have written should prove of service to you, Colonel, or anyone who is interested in the welfare of your branch of service, I shall be amply compensated.

Most respectfully,

FITZHUGH LEE,

Lieut. Col. GEORGE T. DENISON.

LETTER FROM MAJOR GENERAL T. L. ROSSER, C. S. A.*

Baltimore, Md., January 27, 1868.

Colonel:

Enclosed you will find a few thoughts on the subject of your inquiry of the 18th instant.

I have given you the summary of my convictions without discussing the circumstances which led to them.

Neither the Yankees nor Confederates employed cavalry in the late war, it was all *mounted rifles*. I had one brigade (Ashby's old command), and its history fully sustains the theories of Sydlitz and Nolan as regards the irresistibility of cavalry charges.

Cavalry can sometimes be employed successfully in a *coup de main*, but is not safe to undertake it without mounted rifles. During the late war, I rode into the strongly-fortified post of New Creek and captured the garrison, with cavalry, and with the loss of only two men. But when I undertook the same thing at Beverly, I saw I would not succeed on horseback, and dismounted in two hundred yards of the camp, and attacked it as infantry, and thus easily accomplished on foot that which I undoubtedly would have failed in on horseback.

Cavalry was not used on the battlefields as Ney and Murat used it under the great Napoleon, and the reason was, *that it was not cavalry!*

I am pleased to serve you and my noble friend General Early.

Very truly yours,

THOS. L. ROSSER,

Major General, C. S. A.

Colonel GEO. T. DENISON.

THE CAVALRY SOLDIER.*

No soldier should be taken into the cavalry service *directly*, but into a general camp of instruction, and there exercised in the use of the various arms until his capacity for each be determined, *intellectually* and *physically*. Then no one should be

*From Denison's "Modern Cavalry."

taken into the cavalry who is not possessed of at least ordinary intelligence, a strong constitution, and of more than ordinary muscular power, for in battle his *muscle* and weight of his horse, are to determine results. Hence he should be a good rider and possess a strong arm.

My experience has been, that the majority of men are defective as soldiers in the feet, and if this is the only difficulty they answer just as good a purpose for cavalry service with this defect as without it. Cavalry which is not *thoroughly drilled* and *ably officered* is worthless under any circumstances. These requisites are necessary in every arm, but more so in cavalry than any other; for in battle, a cavalry soldier has his frightened horse to manage and at the same time to use his weapon, at close quarters upon his adversary, whilst infantry and artillery are employed more or less at long range.

In this country, United States, where there is so much wooded and mountainous country, mounted troops should consist of *cavalry* and *mounted rifles*, in the proportion of two of cavalry to one of *mounted rifles*. The cavalry armed with *sabers* and *pistols*, and *nothing else*. The mounted rifles armed with *breech-loading carbines* and *pistols*, *without sabers*.

I regard the lance a fancy arm entirely; does very well on parade, but worthless against disciplined troops. The saber should be light with sufficient length and strength, and almost if not entirely straight.

The pistol, Colt's heavy revolver, I think the best. "*Spencer's light charge*" carbine, I think, is the best for mounted rifles. The next in order of efficiency is the *Sharpe's carbine*.

The McClellan saddle is by far the best I ever saw for cavalry. It is strong, light, and comfortable to man and horse.

Cavalry in this country cannot be regarded as a *defensive* arm of service, and should never be detached from the main army without being accompanied by *artillery* and *mounted rifles*. It is worthless except in the charge, and should never be used for any other purpose. The cavalry soldier should never be dismounted to fight if you expect him to ride over masses of infantry, but be educated to the belief *that nothing can withstand a well-executed charge of cavalry*, and should feel perfectly at home on horseback. All picketing should be done

by mounted rifles, and all escorts and guards for trains and the like should be composed of the same, and the *cavalry always kept in mass, and used in the charge alone.*

I much prefer the *single rank* formation to the double. It is more easily managed, and nothing like so many accidents occur.

INTRODUCTION TO CAVALRY TACTICS.*

Much has been said regarding the relative advantage of single and double rank formation. We have seen that the depth of formation has been gradually decreasing during the last two thousands years from ten or even sixteen ranks to the present system.

The most perfect system of formation is that which enables the commander to do the most service with a given number of men. We will suppose a cavalry brigade of four regiments to be drawn up to charge an enemy. With the single rank formation the brigade will be formed in four lines and inflict upon the enemy four successive shocks, each of which would be nearly as severe as a charge in two ranks, and the number of shocks being double, the amount of execution would certainly be much greater.

Another advantage in single rank, is the greater facility with which troops can be handled and reformed, after the confusion of a charge, and what is of more importance, disorder or confusion are less liable to be incurred. These, together with several other minor considerations, have induced cavalry officers of most experience both in Europe and America, to prefer the single to double ranks.

By forming the flank squadrons in echelon, the enemy would be ignorant as to whether the regiment charging them was in one or two ranks, and, therefore, the moral effect would be the same in both cases.

*From "Cavalry Tactics" by Major General Joseph Wheeler, C. S. A.

EQUINE HEROES OF PICKETT'S CHARGE.

(From *The Breeder & Sportsman* of October 25, 1913.)

IN all the countless columns written in the last half-century on the charge of General Pickett's division at Gettysburg, and in all the detail of that frightful slaughter, nothing has been said of those among whom the death toll was deadliest—the horses of that devoted column.

Every horse which entered that fatal charge met its death; not one withstood the withering fire of Northern cannon and rifle even long enough to reach the Union lines.

Five horses were in the charge. Although there were two or three score mounted officers in the attacking division, General Lee, foreseeing the tremendous mortality that must ensue before the Southern line could reach the Northern trenches advised all officers who could do so to lead their respective commands on foot. It was clear to him that a horse and rider, offering such a fair target in any attempt to cross the intervening field, could not live in the storm of shot and shell from the Union batteries.

His advice was taken by all except five. These were Generals Garnett and Kemper, commanding two of the three brigades composing Pickett's division; Colonels Hunton and Williams, and Captain Jones, General Garnett's aid.

General Garnett had been sick, and was advised by his surgeons just before the charge not to attempt to lead his brigade. He disregarded their protests, and was lifted into the saddle, being too weak to walk. Wrapped in a faded army overcoat—for, despite the heat of the day, he was suffering several y from chills—he rode at the head of his line on his magnificent horse, Red Eye, the finest in all General Longstreet's corps. But before he had covered half the ground to the goal of the Union guns both he and his charger fell dead, each pierced by several bullets.

General Kemper, on his dark horse, had reached the famous Red House without serious mishap to either horse or man. Here, however, they were met by such a sleet of lead that the fine bay was killed almost instantly, while the General, badly wounded, was left for dead on the field.

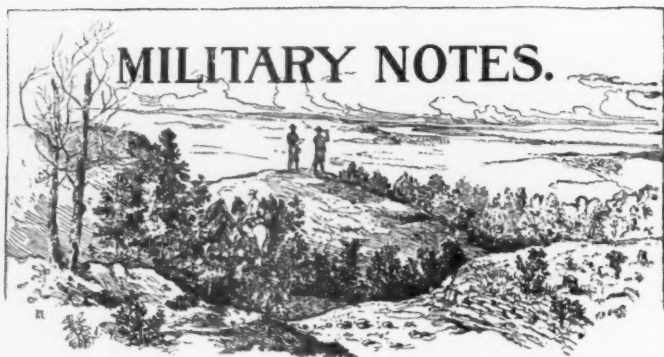
Colonel Hunton, mounted on his orderly's dun horse, was the first officer struck. Hardly had he called to his men to follow him when a minnie ball pierced the calf of his leg and smashed on nearly through the body of his horse. The game animal bore him safely beyond the firing range, and then fell dead.

Colonel Williams and his brown mare reached the Red House unscathed, but here they met the same destroying hail that had swept away Garnett and Kemper and their horses. Both horse and rider tumbled in a heap together, dead.

Captain Jones had his bay mare killed under him early in the action. He himself escaped without a scratch, the only one of the five who did so.

It was thus that these five war horses met their death, four of them finding it in the same fatal volleys that laid their riders low. The good markmanship of the Union gunners and riflemen is evidenced by the fact that all these fatalities took place in the vicinity of the Red House. This building was hardly half way to the Federal batteries.

That every horse should have been thus destroyed before half the journey was accomplished shows how vain was the hope that Stuart's or any other body of Southern cavalry could have lived an instant in the withering fire between the Red House and the Union guns.



THE FARM TO THE CAVALRY—GREETING!

ABOUT nine years ago I visited a large farm in this state and there, for the first time, saw an automatic oat-cleaner in operation. Although I had spent nearly a quarter of a century in our cavalry garrisons I had never seen such a machine. It was very simple, consisting merely of a wooden trough with a false bottom of wire-cloth, and set up at such a slope that oats poured into it at the upper end would run out at the lower end. The dirt sifted through the wire-cloth and ran down under it along the bottom of the trough, while the oats ran down on top of the wire-cloth and were very thoroughly cleaned.

I was at that time on detached service, but I made up my mind that as soon as I rejoined my troop I would make such an oat-cleaner and save my horses from eating dirt with their oats. When I rejoined my regiment I was a belated major, but I had not forgotten the oat-cleaner. I immediately began talking about it to the officers of my squadron, and it was not long before I was gratified to find one set up and in operation in one of the troop stables. This served as an object lesson to the other

troops and within a very few days they were also provided with cleaners.

Last year I returned to this big farm to find two other practical machines in operation which I have never seen in use in the army, but which might be introduced into mounted garrisons with profit to the service. The first is a feed mill run by a gasoline engine. We used to have at old Fort Clark, in the days when we fed part corn, a feed-mill attached to the post saw-mill, for crushing the corn; but the mill on this Dakota farm is for grinding oats. And every grain of oats fed to the horses is first ground in this mill.

Now the object of this mill, like that of every other piece of farm machinery, is to make money. It makes money by saving oats—by making it possible to get the same amount of work out of horses and to keep them in the same or better condition on a smaller quantity of grain than was formerly fed to them whole. There are upwards of 100 horses on this farm, and the foreman told me that five pounds of ground oats to the horse fed three times a day, enabled his animals to do the same amount of work that they formerly did on three daily feeds of seven pounds of whole oats, and at the same time kept the horses in the same condition of flesh.

This feed-mill makes a saving, therefore, of 600 pounds of oats a day for this farm, or 219,000 pounds each year; or figuring thirty-two pounds to the bushel, 6,844 bushels. If the price of oats were fifty cents a bushel, which it sometimes is, but not now, this would make a yearly saving of \$3,422.00 for the farm. According to these figures the Quartermaster's Department might well afford to furnish each squadron of cavalry a feed-mill and gasoline engine. I find that every large farm in the Red River Valley has its feed-mill, and that every owner of horses in this part of the country, who can do so, feeds ground oats; and that generally stockmen count that it saves twenty-five per cent. and keeps their animals in better condition.

But the gasoline engine does many other things on this farm, one of which is to furnish power for the other machine mentioned above. This is a grooming-machine. Of course we have known about grooming-machines for nearly a quarter of a century. Major George W. Read, then a second lieutenant, de-

scribed one in the *Military Service Journal* as far back as 1890. They have been in use in many of the big stables in the cities for many years—but has anybody ever seen one in any of the big corrals in the army?

The advantage of a grooming-machine is not only that with it two men can groom as many horses in an hour as that thirty troopers groom in the same time by hand; but the machine groomed horses will be cleaned as they seldom are cleaned with curry-comb and brush, especially when they have on their winter coats. Of course troopers must groom their mounts in garrison in order to know how to groom them in the field; but it is doubtful if they require fourteen or even seven hours of practice each week in order to learn how to groom a horse or to "keep their hands in." Moreover there are doubtless some old fogies in our cavalry who consider daily grooming, like dress-parade, a matter of discipline; and, when they have their attention invited to the amount of time a grooming-machine would save, will want to know what the Government pays a trooper for if not for grooming his mount—like the farmer who wanted to know how much an old hen's time was worth, when the incubator agent told him as a final argument that an incubator would save a lot of time. But there are men of the younger school in our cavalry who believe that every minute of the trooper's time that can be saved from useless drudgery can be profitably employed otherwise.

M. F. STEELE,

Major U. S. Army, retired.

Fargo, N. D.,

October 5, 1913.

A COMBAT EXERCISE.

The Editor:

I ENCLOSE you herewith a "*combat exercise*" which I have found extremely useful for teaching the phases of the mounted and dismounted combat of cavalry versus cavalry.

It is possible you may want to call attention to it in your "Professional Notes."

JAMES PARKER,
Brigadier General, U. S. A.

HEADQUARTERS FIRST CAVALRY BRIGADE,

Fort Sam Houston, Texas, October 1, 1913

General Orders No. 21.

The following combat exercise, No. 5, is published for the instruction and practice of the brigade.

THE REGIMENT OR BRIGADE,

Attack and Evasion, in a Wooded Country, free from Fences.

1. Terrain: A section of country having a width of from one mile to a mile and a half, and a length of from two miles to four miles, containing abundant cover, no fences, giving an opportunity for cavalry to move freely, (the best terrain is a park-like alternation of woods and fields). The borders of this area (to which the exercise must be restricted), should be plainly defined.

2. The force is divided into two nearly equal parts, the Reds and the Blues. The mission of the Reds is to pass from one end of this territory to the other, in spite of the opposition of the Blues. The exercise commences with the two opposing forces in contact, *i. e.*, their advanced scouts have discovered each other.

It can be assumed that the Reds are a detachment of cavalry, which after a raid or reconnaissance is endeavoring to rejoin the main body, and find themselves in a defile which the enemy is endeavoring to block. Or, the Reds, are a contact squadron whose instructions make reconnaissance more important than fighting. In general, the mission of the Reds is to traverse the enemy's territory, evading the enemy's forces rather than engaging them. The mission of the Blues is to prevent the Reds from carrying out their designs and, if possible, to destroy them.

The conditions are such that neither commander is justified in scattering his command or breaking it up into small detachments.

3. From the nature of the problem, each force being in the presence of the enemy, a formation suitable for combat is desirable, as the formation in one or more lines of platoon columns, of fours, etc. Scouts under the supervision and command of a commissioned officer should cover front, flanks, and rear. The machine gun platoon should be in a position of protection.

4. The problem gives rise to the following situations:

Situation (a).—The Reds find the Blues in position, dismounted. Leaving a small dismounted detachment to act as a detaining force (which will then mount and rejoin), the Reds, concealing their march behind cover, attempt to pass around the flank of the Blues and toward their objective.

Situation (b).—The Reds find the Blues about to dismount to fight on foot. If within 600 yards (a distance which they can cross in one minute) they charge the Blues, hoping to overthrow them before they can form up and deliver their fire. If the Reds find themselves at a distance of more than 600 yards from the Blues they had better retreat hastily to cover.

Situation (c).—The Reds find the Blues about to make a mounted attack. If within 600 yards the Reds must meet the attack by a counter charge. If at a greater distance than 600 yards, dismounted action is nevertheless (ordinarily) impracticable. For, if the Reds dismount, the Blues will probable do the same, and, holding the Reds in place by fire action, will make it impossible for them to fulfill their mission, which is,

primarily, to reach their objective. A preferable course for the Reds would then be to make a counter charge, or, by evasion try to throw the enemy into confusion and then charge.

Situation (d).—The Reds find the Blues dismounted and so disposed as to cover with their rifle fire the entire width of the defile. Under these circumstances the only recourse of the Reds (after due reconnaissance, in order to discover where the line is weak), is to charge through the Blue line, using a more or less open formation, and trusting to the speed of their horses to diminish casualties. The line pierced, the led horses of the Blues should be at the mercy of the Reds.

Situation (e).—The Reds having passed the Blues, are pursued by them. In this case the proper rôle of the Reds is to continue their march with a view to completing their mission and reaching their objective, but taking advantage of any confusion among the pursuing Blues to punish them, if it can be done without endangering the Reds' retreat.

In this case an opportunity is given to the Blues to attack the flanks of the retreating columns by swarms of foragers, firing from the horse with pistol and rifle.

5. This combat exercise illustrates the value of initiative, of quick decision, of vigorous action, by commanders of regiments, squadrons, and troops. It teaches coöperation, team work, between organizations. It is a school of instruction for scouts. It demonstrates the great advantage which can be gained by making a skillful use of the terrain. It also demonstrates the value of mobility and the advantages of mounted action over dismounted action.

The exercise is applicable, to a less degree, to smaller bodies of troops, such as squadrons, and to country which, while devoid of trees, affords cover.

6. In order to be able to practice the exercise without injuring men and horses, the horses must be so well trained as to be absolutely under control, so that they can be pulled up without collision.

At the conclusion of each attack the umpire or senior commander will halt the movement, discuss the conditions, and give time to the Blues to move on and make the necessary dispositions for renewing the exercise.

* * * * *

7. In case the terrain is wooded but fenced up, the free movement of both Reds and Blues is limited, and the problem of evasion is complicated by the necessity for cutting fences and making outlets. The Blues have a great advantage, and are able to make a greater use of destructive fire action.

8. In case the terrain is level, open, and without fences, as in many parts of Europe, evasion is difficult, and a fire fight more probable.

By command of BRIGADIER GENERAL PARKER,
W. S. SCOTT,
Lieut. Col., Cavalry, Adjutant.

THE PISTOL.

I HAVE just read Captain Munro's article on the pistol in the September JOURNAL and believe he has firm hold of the proper ear.

It is a pity that there should be any question as to the propriety of arming the cavalry with the pistol just at the time when a thoroughly efficient weapon has become available, and especially so for mounted firing. The automatic Colt is a long finger and really points itself; and all the firer has to do is to pull. It is an easy weapon to carry, with a proper holster, is out of the way and does not "flop" at increased gaits; and there is no question of its superior accuracy mounted over the revolver. Although I must say that my experience in this respect was acquired with the .38 automatic, the difference between my previous poor mounted work with the revolver and the results I got in informal practice with the automatic, was illuminating. Where I had previously missed the "elephant" target with distressing frequency with the revolver, I hit tomato cans at equal range often enough to demonstrate the adaptability of the "automatic." Red wood fence-posts were easy; and this for a man who had always to rely on a good score dismounted to bring his total score up where it belonged. Going back to the revolver for the sake of the dismounted

pistol contests, effectively criticised by Captain Munro, was, however, disastrous to the control of the automatic on account of the difference in the grip and consequently of the muscles used; and I find that I, at least, cannot use both weapons well. The military man, however, need not bother with the practice of other than his assigned weapon, when it is the best to be had, as in our case.

We are a pistol nation. We have all sorts of pistol traditions. Our frontier was conquered with the rifle and ruled with the pistol (with occasional lapses in favor of the sawed-off shot gun) for years.

I am sure that Captain Munro is right when he says that thorough proficiency can be developed with this weapon; and he points out with certainty the obstacles to such proficiency when he attacks the concentrated season of practice. I would like to see a troop of cavalry ride past the targets daily going to and coming from troop drill and I believe each cavalry soldier should fire ten ball cartridges a month at the figure riding at the gallop, *during decent months for firing*, and every month if weather permits, or if there is a riding hall available.

The figures used should be the standing target or the *rider* of the mounted figure constructed of malleable iron or boiler plate. Such targets would be in the end cheap and there would be no question of a hit. These targets with big staples at the back could be slipped over four inch pipe posts and our grandchildren could shoot at them.

This recommendation was made about 1906 and the Ordnance Department wanted to know what would happen to the fire at a range of five yards if high power weapons with jacketed projectiles were used against iron targets. The experiment was tried at that range, with a slicker judiciously disposed to collect stray metal; and the longest jump back on any metal was nine feet, accurately measured on the sand beach at Camp Overton, so there is nothing to that question.

The pistol is a weapon of morale. A man equipped with one feels bold and daring, as a cavalryman is required by regulations to feel, even if he blows his thumb off with one occasionally; and contrarywise, the cavalryman, on patrol, say without such a weapon, in the possible presence of a possible

rifleman who is looking for him, feeling that the said rifleman is about sure to get him while he is dismounting to use his rifle, is robbed of the major portion of his "*elan*."

So far as personal proficiency is concerned, I am under no illusions as to the rifle mounted. I hit something from a horse with a carbine, once, and thought I was on the verge of great discoveries. Sedulous effort and much of Uncle's ammunition failed to score another hit; so I am constrained to the belief that so far as certain individuals go there is little future in such practice.

Query: Why is the pistol not available for preparing the way for the charge against opposing cavalry? Supposing the flanks of the advancing enemy are attacked by especially trained foragers on fast horses, each man with three loaded clips for his pistol? They could at least stir up the flanks, might get in rear and might break or shake the enemy's formation before contact with our echelons. It would be a good deal like torpedo boat service; rather costly, but success here might easily be a most valuable factor in deciding the charge.

I venture the belief that the pistol is the mounted fire arm, that it can be made effective and that it ought to be so made without delay by the cavalry.

J. A. COLE,

Major (Cavalry) Q. M. Corps.

BRIGADE POSTS.

YOUR editorial in the September number of the CAVALRY JOURNAL on Brigade Posts brings to the front a very important subject, and the future training of the army will be greatly influenced by the method finally adopted in concentrating and quartering our regiments.

The reports of the Organization of the Land Forces of the United States does not recommend the Brigade Post, but it does recommend concentrating tactical units in "closely allied groups of stations" * * * "so that they may be periodically assembled for combined training."

In speaking of assembling a brigade it does not mean necessarily that the units composing a brigade must be in the same post, but these organizations must be located so that they can be assembled by easy marches for brigade training during the period of the year allotted to that work. The ideal situation may be broadly stated as follows:

The company and troop commanders must be given a free hand, under broad-minded superiors, during the period devoted to the training of their commands. When that period is over, a battalion or squadron should be at hand into which the captain's command is absorbed; and here again the battalion or squadron commander must be given a free-hand under intelligent supervision, during the period allowed him in which he must make his unit efficient. Upon completion of this period the regiment must be at hand to absorb the battalion or squadron.

Certainly all the elements of a regiment should be in the same post. The regimental commander should be given a great deal of latitude during the period assigned for the training of his regiment. This period having ended, the regiment should find itself so located with respect to the other units of the brigade to which it belongs that the brigade can be assembled by easy marches for brigade training. Under such a system each subordinate is responsible for the proper training of his unit. If any unit is deficient upon entering the period of training of the next higher unit, then its commander should be made to feel the consequences.

Brigade Posts as we sometimes understand them, and as we have had them in some instances in our service, have given us only a maximum of interference by superiors, and the subordinate, having only a minimum of responsibility, will be very liable to develop into a very narrow minded superior.

If we accept the Brigade Post as a general proposition we will eventually find the brigade commander the commanding officer of the post. As such he will become involved in the administration and supply of the post and he is liable to give little attention to the more important tactical duties of his position as brigade commander. His supervision of the training of the

smaller units is liable to ultimately consist of interfering with subordinates in matters of quartering, supply and police.

The brigade commander should be in a position to supervise the training of his brigade, but he must be restrained from meddling. During the periods of brigade and division training standing orders must require him to actually command his brigade, and he must not be permitted to simply adopt the rôle of a superior umpire while turning the command of the brigade over to the senior colonel.

There seem to be many candidates for the position of brigadier general, but few brigadier generals wish to actually command infantry brigades. The proper supervision of the training of a brigade means a lot of work intelligently performed. If, in addition, the brigade commander will prepare himself in his tactical duties he will have ample to keep him occupied. But how often do our generals "pass the buck" when it comes to actually commanding during a tactical exercise.

The idea that anyone can command an infantry brigade is erroneous. An officer who has specialized all his life and who has no infantry training cannot at the age of fifty-five or thereabouts, be jumped into the command of a brigade and produce the good results which the government should insist upon.

In connection with the various methods to be considered in quartering troops it must be remembered that the quartel system is ideal only when adequate training ground is available locally. Without such training ground the quartel system is little better than prison life.

Adequate maneuver areas are as necessary in the training of the army as is the open sea in the training of the navy.

GEORGE VAN HORN MOSELEY,
Captain First Cavalry.

THE PISTOL.

The Editor:

THE recent articles on the pistol by Captains Hawkins and Munro in the CAVALRY JOURNAL impel me to air my meager views along similar lines. It seems that the majority of cavalry officers are opposed to dropping either the saber or pistol from our equipment, and, of course, the rifle (or carbine, later, let us hope) will remain.

These being true, I beg to suggest some ideas as to proficiency in the use of the pistol. This proficiency will be all the more needed as soon as the new automatic pistol is issued to the service.

As the pistol is essentially a cavalry weapon, the cavalry should have a course of target practice with it more extended than the present course. In order to do this, it will be necessary under present condition, to curtail the course with the rifle.

It is more essential that the cavalryman should be able to shoot accurately at long distances with the rifle than at short distances. Therefore, eliminate the present Expert Rifleman Test for the cavalry and substitute the same time, ammunition allowance and extra pay for the course in pistol firing, extending the distances for dismounted firing to 100 yards and for mounted firing to 50 yards.

Instead of paying the cavalryman \$5.00 monthly for qualification as an expert rifleman pay the same amount for qualification as an expert pistol shot. That is, qualification as a sharpshooter with the rifle to carry the usual \$3.00 additional pay monthly, and the remaining \$2.00, not as expert rifleman, but as expert pistol shot. This extra pay for the pistol to extend for one year only, or until the end of the next regular practice season, and also for the reason that a good pistol shot needs more constant practice to remain such than does a good rifle shot.

The present Expert Rifleman Test is principally a matter of luck, and the marksman's course gives sufficient instruction

in the shorter ranges for all effective purposes. Then the field firing will supplement the M. M. course.

But it is necessary that a cavalryman should be a good rifle shot at long ranges, therefore, let his known distance firings with the rifle cease after the sharpshooter's course. Thence to a more extended course with the pistol, particularly mounted.

Captain Munro truly states that not enough time is given to pistol practice, particularly mounted, but let extra pay be given as suggested above, and there will be a tremendous increase in interest and efficiency the very first year.

Then with all our cavalry good pistol shots, who would doubt the outcome of a surprise attack by a well mounted cavalry force on artillery in column or in flank, broken or shaken infantry when not intrenched, etc.

Cavalry well trained in the use of the pistol, mounted, will be distinctly more aggressive than if poorly trained. Our scouts and patrols would feel more secure, and they must have this morale in order to carry out in an intelligent and proper manner their duties as such.

To my mind the articles by Captains Hawkins and Munro are conclusive, and this is intended solely to point one way to renewed interest and proficiency with the pistol.

WILLIAM R. POPE,

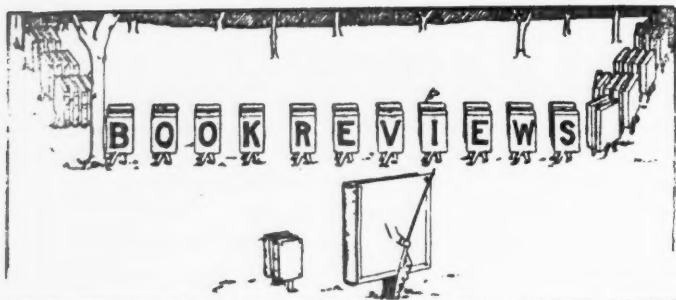
First Lieutenant, Cavalry.

THE NEW SADDLE.

WHY is the center of gravity raised on the new saddle? I dare say the center of gravity of the packed saddle has been lowered by skillful packing arrangement, but the saddle seat seems to be raised a couple of inches farther off the horses back than in the McClellan or the saddle first devised by the board. I rode that first saddle before it had anything but the leather covered bars to sit on and found it the easiest, most comfortable saddle I ever rode. I am utterly at a loss as to why that seat has been raised.

Another matter I cannot understand is the steel open stirrup. Granted that the letters of cavalry officers to the board indicated a preference for the open stirrup, I do not believe that the open stirrup advocates wanted a steel stirrup. I enjoy an open steel stirrup myself under certain conditions but I never want such a stirrup in zero weather, and I cannot believe that any man who ever rode in such weather does. The steel stirrup is valuable for the occasions suitable for our pretty new spur, but I hope that officers having the decision, when it comes to dividing the new equipment through by heat plus cold, plus rain, plus recruits, plus volunteers, will get zero so far as that steel stirrup is concerned.

J. A. COLE,
Major (Cavalry) Q. M. Corps.



**Training
to
Jump.***

We have received from the press of E. P. Dutton & Company a book which should appeal to those of our officers who are interested in cross-country riding and jumping.

The book is by Lieutenant Geoffrey Brooke of the 16th Lancers, British Army. Lieutenant Brooke is an instructor at the Cavalry School at Netheravon, England, and has been a constant winner at the competitions in the International Horse Show at Olympia.

The book is divided into chapters as follows:

I. Theory; Jumping Qualifications; Condition; Balance; Bits.

II. First Lessons; Free Jumping; Schooling in the Long Reins; Circular Manège.

III. Schooling Mounted; Dispensing with Wings; Presenting a Young Horse at a Fence; Sticky Fencers; Horses that Rush at their Fences; Horses that are unable to attain their Correct Balance when Jumping; Martingales.

IV. The Rider's Seat; Action of the Hands; Refusing Horses; Amount of Schooling a Youngster May be Given; Hunting.

*"Training Young Horses to Jump." By Lieutenant Geoffrey Brooke, 16th Lancers, British Army, 1913. E. P. Dutton and Company, New York. Price \$1 50.

V. Show Jumping.

VI. Hints for Preventing Some of the Numerous Troubles that occur with Young Horses.

VII. Types.

The author states in the beginning that he does not claim to propound any new theories, but that throughout his book his plea is for moderation, and that he is presenting only what experience has proven to him to be the best from well-known books on horse training.

The work is written in a clear, interesting style and is full of good pointers for anyone interested in horse training. It has three illustrations in color and thirty-two in black and white. At the end of the chapter on "Hunting," the author has appended some very clever verses from "The Dream of an Old Meltonian," which describes the hunt of a youngster.

To give some idea of the pains that continental riders take to reach perfection in training their horses to jump, the author gives the following extract from a report of an officer of the 16th Lancers who was on duty at the Italian School: "It is impossible to lay down any rule about the rate of progression; at Pinerolo it seems extraordinarily slow, but the result is that all horses jump exceptionally well. Start with a bar on the ground, go over this at all paces until the horse has absolute confidence, and then raise the bar a notch at a time. For the first six weeks at Pinerolo the bar was never raised more than one foot from the ground. The Italian motto is 'Patience and Progression.' The final result is that no horse ever refuses or rushes."

In following out the lines of schooling suggested by the author, the rider should have a horse that is not only a good hunter, but also a good show jumper. The author devotes one chapter to good suggestions on preventing, or dealing with, in the first instances, some of the many ailments that young horses are heir to. This chapter also bears on biting, feeding, and shoeing.

In the last chapter the author presents photographs of six exceptionally good jumpers, each representing more or less a different type of horse from the point of view of conformation. Also included in this chapter is a talk on the natural balance of a

horse, and points on conformation to assist one in picking out horses to train for jumpers.

The author in his "Final Words," speaks about the reasoning power and memory of the horse, in relation to his training, and counsels endless patience and progressive training in order to secure the best results.

The book is handsomely bound, printed on fine paper, and will prove an excellent addition to any horseman's library.

H. E. MANN,

First Lieutenant Twelfth Cavalry.

**Donelson
Campaign.***

This book is a compilation of documents, official and otherwise, pertaining to the Donelson Campaign of February, 1862, for the convenience of students at the Army School of the Line where this campaign is taken up for intensive study. It does not present the history of the campaign in narrative form nor does it form a complete whole in itself as it is merely designed to aid those who desire to study the official records of this campaign by giving them in compact form additional documents not found in Volume VII, of the Official Rebellion Records, which are necessary or useful for the interpretation or checking of the documents in Volume VII. It is, therefore, a volume which will be of use only to such officers as desire to make a serious study of this campaign and have a set of Rebellion Records of their own or access to a set.

*"Donelson Campaign Sources." A Supplement to Volume VII of the Official Records of the War of the Rebellion. Compiled by Captain A. L. Conger, 18th Infantry, and published by the Book Department of the Army Service Schools.—xii, 244 pp. Price eighty cents.

**Under the
Old
Flag.***

Under the Old Flag. Recollections of military operations in the War for the Union, the Spanish War, the Boxer Rebellion, etc. By James Harrison Wilson, Brevet Major General U. S. Army; late Major General, U. S. Volunteers; Engineer and Inspector General on Grant's Staff; Commander Third Cavalry Division, Army of the Potomac; Commander Cavalry Corps, Military Division of the Mississippi, etc.

The above is the title chosen for his autobiography by one of the most successful military men this country has produced in the last half century. If one considers the General's versatility, the diversity of his services, his attainment of independent command at an age at which present day subalterns (if they are lucky) are buying their first lieutenant's shoulder straps, the vast geographical extent of his services, and the almost uniform success of his undertakings, one must conclude that his is the most distinguished name which now adorns the army list. Entering the service as a lieutenant of Topographical Engineers, he performed in succession the duties of aide-de-camp; chief topographical officer of Grant's department; inspector general of Grant's army; commander of a division of cavalry, with the rank of brigadier general, at the age of twenty-six; commander of a corps of cavalry, with the rank of major general, at the age of twenty-seven; and in supreme command of an independent expedition at the age of twenty-eight. Again taking up the sword after twenty-eight years of civil life, he saw active service as a general officer in theaters as remote from each other as Puerto Rico and China.

While the book gives the story of General Wilson's life, both public and private, it is very evident that its heroic period was that of the great Civil War; for over three-fourths of the text is devoted to this subject. The author states that his work is "neither a history nor a military treatise," and he weaves into the narrative of his personal experiences only so

*"Under the Old Flag." Recollections of Military Operations in the Civil War; The Spanish-American War; The Boxer Rebellion, etc. By James Harrison Wilson, Brevet Major General U. S. A.; late Major General U. S. V.; etc., etc. Two volumes, each with portrait; cloth; over 1,100 pages. Price \$6.00, net per set. Postpaid \$6.30.

much of the general history of the war as is necessary to bind it together and give it coherence.

The keynote of the book is its frankness. In discussing men and events, General Wilson gives his estimates and conclusions with the utmost freedom. This is especially the case in the characterizations of the great historical figures with whom he was associated. His criticisms are the results of his own conclusions, and these have not been influenced by the eminence to which the subjects have risen, or the position accorded them in history. As he had exceptional opportunities for judging many of the foremost leaders of the Union armies, his estimates are always interesting, and often illuminating. His relations with Grant, Sherman, Thomas and Sheridan were close and intimate, and if in his characterizations naught has been set down in malice, he does not believe in a charity that ignores or extenuates.

Of these great leaders, he puts Thomas in the highest rank, both as a soldier and a man, and so far as it concerns him, the book contains no word of adverse criticism. Notwithstanding his thorough loyalty to Grant, and the admiration and affection he feels for him, he states that as a general, he was neither a great organizer nor a first-class technical or theoretical soldier—that his success was won by attention to broad general principles. As a man, he does not hesitate to state that Grant drank to excess, and that this weakness jeopardized his career more than once. Nor does he suppress the fact that he was capable of dealing meanly and unjustly with men for purely personal reasons, as evidenced by his shabby treatment of Thomas in the Nashville campaign. In marked contrast to the fulsome estimate of another of Grant's staff officers, he does not set him forth as a thoroughly rounded character, morally impeccable and intellectually omniscient, but shows that he often looked to Rawlins for moral stamina and to Wilson for brains. In other words, his picture of Grant is that of a human, and not of a demigod, and as a consequence, it is far more convincing than a library of eulogies.

As for Sherman, while he liked and admired him, General Wilson considered him distinctly inferior to Grant. He makes him out opinionative and dogmatic, and possessed of no small

share of conceit. That while brilliant, his mind was "more destructive than constructive," and though an able strategist where the capture of places or the over-running of territory was concerned, yet when it came to the chief object of all military operations, namely the defeat or destruction of the main hostile army opposed to him, he was a failure!

Sheridan comes off even less fortunately than Sherman. All opinions to the contrary notwithstanding, the author does not consider him a great cavalry general. General Wilson's experiences while serving in Sheridan's cavalry corps were not wholly satisfactory to him, and Sheridan comes in for some sharp criticism. His failure to take Richmond after Yellow Tavern, is cited as a grave strategical mistake. His retreat by a circuitous route after Trevillian Station, instead of pressing on towards Charlottesville, is considered an evidence of undue caution. His movements and operations having in view "holding open the door" for Wilson's return from the raid against the Danville and Southside railroads, are characterized as flat and inexcusable failures. Finally Sheridan is charged with timidity in the first stages of his Valley campaign.

It would appear from General Wilson's account that he freely offered his advice to Grant, and others, as to the proper plan to be followed or not to be followed and that, as a rule, it was as freely accepted and followed. This is apparent at every turn.

Thus in the Vicksburg campaign: "I urged Grant to give up the campaign by land, and go in person with the main body down the river. Fortunately it turned out that his inclinations were in accord with my suggestion." As to the canal project across De Soto Peninsula, from Tuscumbia Bend: "From the first time I saw it, I condemned it as impracticable." The project was abandoned. Later we read of his prescribing the only feasible plan for the capture of Vicksburg, by turning the defenses south of the position, the fleet and the transports running the batteries. "Wilson" said Rawlins, "I believe you are right, and I shall advise Grant to carry your plan into effect at once." And Grant was not insensible to advice. After Grant had come within reach of the Vicksburg and Jackson railroad, and seemed undecided whether to turn first against

Clinton or to move against Jackson: "I * * * then advised Grant to move his whole army towards Jackson, and to take that place before turning to the west." So to Jackson, Grant moved with two of his corps. After the fall of Vicksburg: "It will be seen that a much better disposition of Grant's forces would have been to send them to Chattanooga before rather than after the battle of Chickamauga. I presented this view as soon as Sherman signified his intention of giving up the campaign east of Jackson." Unfortunately this view was not adopted, and Rosecrans' career suffered a sudden eclipse. At Chattanooga, after Sherman had suffered defeat, and things were at a standstill all along the Union line: "Rawlins, at my suggestion, urged Grant to silence Granger, and give Thomas positive orders for a general advance by the Army of the Cumberland." Whereupon all sulkiness, embarrassment and indecision ceased on Orchard Knob, and Missionary Ridge was swept clear of the enemy. In Sheridan's Valley campaign, when Sheridan after a retrograde movement, seemed loath to advance: "I met General Grant at Sheridan's headquarters and told him so far as I could see we should no longer delay our advance." Sheridan was at once ordered to "go in." Only once did Grant beat him to it. After the drawn battle of the Wilderness: "Grant, catching sight of me, threw up his hand, and cheerily called out, 'Its all right, Wilson, the army is moving towards Richmond!' knowing that I would favor advancing rather than falling back, and he made haste to reassure me."

Considering how nearly indispensable Wilson was to Grant's staff, it would appear that, so far as his own personal interests were concerned, in assigning Wilson to duty with troops, Grant committed a blunder. We are not surprised to learn that on more than one occasion both Rawlins and Dana urged Wilson to return to the staff, for, the book goes on to state: "Grant told Rawlins that he depended more upon my judgment on military matters than upon that of any one else in the army." And Grant was a man of "exceedingly sound judgment." Later, having joined the Western Army, Sherman unfolded to General Wilson his plan for the march to the Sea. "I suggested that * * * he would find it much better to pass through Augusta on the interior short line toward Grant

in Virginia." But Sherman was obdurate, and stuck to his own plan, and, in consequence, the strategic advantage of interior lines passed to the enemy.

General Wilson is in the main highly complimentary to his fellow generals in the Cavalry Corps, Army of the Potomac, Gregg, Torbert and Custer all come in for eulogiums, but there is one significant omission. Naught is said as to the character or the distinguished services of Wesley Merritt. This all the more noticeable as Merritt was Wilson's classmate. One must infer that this was due to strained personal relations, growing out of resentment, on Merritt's part, to the assignment of Wilson to the command of the Third Division. A hint of this is contained in the author's description of the episode of the retreat of the cavalry corps from Kearneyville, in the latter part of August, 1864: "One of my officers, having gone to Torbert's headquarters for such orders as he might wish to send me, while waiting, overheard Torbert and Merritt conferring, and the latter say: 'Give Wilson the rear, with orders to hold on strongly till we get out of the way. This will delay him, so that the enemy will follow him to Halltown and give him hell, while we return leisurely to our camps at Shepherdstown.' My aid promptly reported this aimiable suggestion to me still in the field." So Wilson, instead of "holding on strongly," speedily and skillfully withdrew from hostile contact, leaving Torbert uncovered. Whereupon Jube Early promptly fell upon Torbert's unguarded camps, and inflicted what the author evidently considers retributive justice.

To a cavalryman, the story of General Wilson's services with the cavalry arm is naturally the most interesting portion of the narrative. As commander of the Third Cavalry Division, Army of the Potomac, he shows plainly that conditions in the cavalry corps were not wholly to his liking. He condemns unsparingly the strategical employment of the corps, and is especially bitter as to the part played, not only by Sheridan, but by the entire Army of the Potomac, in failing to secure him a safe return from the raid against the Southside and Danville railroads.

He rejoined the western army with evident satisfaction, not only because he preferred it to the Army of the Potomac, but

also because of the greater independence of action his new command conferred upon him. His first and most strenuous task was the rehabilitation of the western cavalry. To anyone acquainted with the job of getting new or run-down cavalry into shape, the fact that in two months he changed an inchoate mass of scattered and half dismounted regiments into a corps that was to prove the deciding factor in a great decisive victory, will seem the most amazing achievement of a remarkable career.

No one who has studied the battle of Nashville will question the fact that the cavalry corps was the first organization to make any marked impression on the Confederate line. And that until Wilson turned Hood's left flank, there was a stalemate along the whole front of battle. This was the crowning achievement of General Wilson's military career. At Nashville he was the instrument by which a main hostile army was destroyed, and this, we are taught, is the principal object of all military operations.

The exploits of the cavalry corps in the Selma campaign, however creditable, formed but a side issue at best. The author does not think that sufficient importance has been attached to his campaign in Alabama and Georgia by general historians, and while this is perfectly natural, it can hardly be expected that they will accept his point of view. After Nashville, the war in the west was a closed chapter. So far as that theater was concerned, the Confederacy was moribund, and every spark of hope that still glimmered in the hearts of the Southern people, was kept alive by the existence of Lee's army in Virginia. The independent operations of the cavalry corps, Military Division of the Mississippi, merely extinguished the dying embers of a conflagration, which in a few days, or weeks, at most, would have expired of themselves.

But if of minor importance as an historical event, as a military operation, the Selma campaign is entitled to none the less credit. For it was here that the new cavalry leader met the redoubtable Forrest, and succeeded not only in "getting the jump on him," but also in "gittin' thar the fustest with the mostest men." General Wilson is justly proud of the tactical results achieved at Selma, but they are not to be compared, in importance, to his strategic victory in effecting a superior con-

centration while his opponent was in a state of hopeless dispersion. As to the character of the tactical undertaking, one may doubt if it was as formidable as it appeared. Richard Taylor was no carpet knight, and if he saved himself by flight even before the battle joined, and if the entire defense depended upon a single faint hearted Confederate brigade, and of "judges, lawyers, preachers, doctors and government employees, old and young alike," driven into the fortifications by the "inexorable Forrest," whose one word for all was: "Into the works, or into the river," then the taking of Selma was not such a dooms desperate business after all. One may conjecture whether the arrival of the Englishman, Millington, in Wilson's camp, with such opportune information as to the formidable nature of the Selma defenses, without a word of the weakness of the actual defense, was not a smooth stratagem intended to induce hesitation and delay which would give Forrest time to collect the scattered resources. If this is so, the ruse was tried on the wrong man.

While General Wilson's book is "not history," there is valuable historical material to be found in it. Few had such favorable opportunities as he for judging the temper of the Union generals and troops after the second day's fighting at Antietam. He found Sumner, discouraged; Fitz John Porter, glum and lacking in aggressive temper; Meade, with little aggressive temper left; Hooker, whipped; and the whole line of battle in a shaky condition. In other words, the army and its leaders were on the verge of demoralization. One must stand amazed at Lee's clearness of vision, when he decided that conditions favored a counter attack on the morning of September 18th, and was deterred from ordering it only by the insuperable objections that his most trusted lieutenants had no futher stomach for the fray.

The inside history of the relief of McClernand is told with a particularity to be found in no other source known to the undersigned.

The author explodes the fantastic story of the "mule charge" at Wauhatchie, which Horace Porter rolls over his tongue with such evident gusto.

The case made out against Sheridan, and incidentally against Grant, Meade and Humphreys, for the failure to keep open the door for his return from the raid against the Southside and Danville railroads, and which, from the assurance given him, he had every right to count on finding open, is very strong. The author supports his case by incontrovertible evidence, and in a manner to satisfy the most exacting of historical critics.

In giving a full and absorbing account of the independent operations of the cavalry corps, Military Division of the Mississippi, the author invites the attention of military students to an episode too often neglected, especially by those specializing on the work of American cavalry.

But while "neither a history or a military treatise," it would have been just as well if the author had kept his book free from historical inaccuracies. For example, he claims Wilson's Creek as a Union victory. Yet the records show that the Union forces engaged in that battle abandoned the field and the body of their general to the Confederates, and made a rapid retreat to Rolla, a retrograde movement of over one hundred miles.

Fort Pulaski's "thick granite walls" happen to be built of brick.

In reciting the military achievements of his brother Henry, in which he takes a fraternal pride, he has him wounded while leading his company of the 18th Illinois "in a successful charge against the enemy's works at Donelson." The only successful charge made against the Confederate works at Donelson which is mentioned in the records, is that which was made on the 15th of February by Lauman's brigade of Smith's division. The 18th Illinois is shown to be in Oglesby's brigade of McClellan's division, and according to McClellan's and Oglesby's reports, was not seriously engaged until it was overwhelmed on the morning of February 15th, the balance of McClellan's division by the attack of Pillow and Buckner. From these reports it must be inferred that any charge made by the 18th Illinois on that occasion must have been to the rear.

General Henry E. Stoughton was not taken prisoner in 1864, "in the Shenandoah Valley, while visiting ladies outside of camp." He was captured by Mosby on the early morning

of the 9th of March, 1863, while asleep in his bed at Fairfax Court House, within fifteen miles of Washington.

When the cavalry corps joined the Army of the Potomac on May 24th, 1864, Lee was in position, not on the South Anna, but on the North Anna.

In making out a case of discrimination against West Pointers in the selection of officers for high command in the Spanish War, the author states: "With the exception of Lee and myself, no West Pointer had corps rank, and none received the command of an independent expedition." Wesley Merritt was assigned to the command of the Eighth Corps, and headed the independent expedition to the Philippines. It will be recalled that he was the only West point man, not in the staff, who held general's rank in the regular army at that time.

These, however, are errors of small importance, and minor defects at worst. But there is another statement which requires more careful scrutiny. In criticising the "March to the Sea," the author writes:

"It is now well known that he (Sherman) met with no effective resistance, but had a picnic, living on the fat of the land, going to Brunswick first, and finally to Savannah."

This, I believe, will be a surprise to most historical students. The official itineraries, show that no part of Sherman's army went within sixty miles of Brunswick. General Wilson, in criticising Sherman for rejecting his advice to march from Atlanta by the shortest line, through Augusta, to Grant in Virginia, intimates that Sherman made a strategic blunder "which the enemy improved by collecting the remnants of Hood's defeated army from Tennessee, and, uniting it with all the other Confederate troops they could find outside of Lee's army, confronted the invaders in the Carolinas with a perfection of strategy and a boldness of determination which, like Hood's movement against Nashville, lack nothing but weight to give it a complete victory."

The wider the detour, the greater the blunder, and considering the gravity of the charge, it would be interesting to learn from what source General Wilson derives his information that Sherman, in his march to the sea, "went to Brunswick first".

In closing, I hope I may be pardoned for saying that in describing the work of his officers and men, the author is too lavish in the use of adjectives. The descriptives "splended", "dashing," "invincible," and "gallant," (especially "gallant") are slightly overworked. Lee, who was chary of adjectives, once designated a young artillerist, dead upon the field of battle, as gallant, and no chronicler has ever forgotten the epithet. How would it have been had he so characterized every officer whose name it became necessary to mention? That praise would have lost its savor goes without saying. Humphreys closed his remarkable story of the Virginia campaign of 1864-5 with these words:

"It has not seemed to me necessary to attempt a eulogy upon the Army of the Potomac or the Army of Northern Virginia."

And he might well so terminate his labors, for the calm, temperate, judical language of every page bears testimony to the endurance, determination, and unflinching courage of the greatest armies America has ever produced.

This, however, is a question of taste, and may well be forgotten in our recognition of the great service General Wilson has done the arm in recalling what American cavalry, when fearlessly and intelligently led, can accomplish. In its organization, armament and tactics the Cavalry Corps, Military Division of the Mississippi, was essentially American. It had no foreign model or prototype, and yet, can the cavalry of any of the great military powers show a greater record of achievement? I, for one, venture to doubt it. And until the military world has produced a more salient example, the most fruitful field for study for the cavalry officer, or for the well wisher of the arm, is to be found in our military annals.

S. H. E.

**Campaign
in
Thrace.***

The author of this work is Major Philip Howell, General Staff, British Army. The book is made up of six lectures, given, more or less in the form in which printed, at the Staff College at Camberley in February and March, 1913, following a visit made by the author to the battlefields of Thrace and to the headquarters of the Bulgarian Army during the armistice between the first and second phases of the war.

The first lecture deals with the problem of the initiative in war and the general plan of campaign of the Bulgarians and their special plan for the invasion of Thrace; the second lecture with the Bulgarian mobilization and concentration; the third with the strategical deployment (18th to 20th of October); the fourth with the capture of Kirk-Kilisse; the fifth with the battles of Loule-Bourgas and Bounar-Hissar, and the sixth with general comments on the war and a discussion of the art of command, moral and psychological considerations, use of the bayonet, "*evening attacks*," armament and equipment, and entrenchments.

The sources of the Major's information were from the members of the Bulgarian General Staff and what he obtained from his own observation. In the absence of any official account of this part of the war and generally of any information on the subject, it is impossible to criticise any of his statements of fact.

The lectures are each prefaced by a statement of the general and special situation as it was known to the Bulgarian General Staff up to the moment of decision. This is followed in each such case by an "*estimate of the situation*" much as it might have been made by the Bulgarian General Staff and their ultimate decision and method of execution. In this respect the lectures greatly resemble an hypothetical map problem but with the added element of reality.

The cavalryman will find much of interest in the book concerning the excellent employment of the cavalry division during the concentration of the Bulgarian Army, and its clearing the front and movement to a flank when the armies advanced

*"The Campaign in Thrace." By Major Philip Howell, General Staff, British Army, 1912. Hugh Rees, Ltd., London. Price 4 shillings, net.

into Thrace; also, its misuse during the engagements along the line Loule-Bourgas—Bounar-Hissar.

The infantryman will be interested in the formations adopted by the armies and the various divisions thereof in the advance, and in the frontages, depth of column of attack as originally ordered and the "*spreading out*" that occurred during the period of combat from October 28th to November 1st; also, in the author's remarks on "*evening attacks*," "*use of the bayonet*" and entrenchments.

The use of the Bulgarian artillery against the Turkish reserves on November 1st, causing them to break and flee in great disorder while the Turkish front line was still holding, should be of great interest to both the infantry and field artillery.

The language of the text is concise and clear. The typography and plates are excellent.



THE TENTATIVE CAVALRY DRILL REGULATIONS.

As our readers have learned from the weekly service periodicals, a set of tentative Cavalry Drill Regulations have been tried out recently at the cavalry camp at Winchester, Virginia, where there were assembled two full regiments and two squadrons of a third regiment, practically a cavalry brigade. At the same time, this was a try out, also, to a certain extent, of the proposed plan to reduce the size of our cavalry regiments.

There were present, in addition to the Board detailed to report upon these tentative drill regulations, several of our cavalry officers of experience and the result of their conclusions as to the new drill will be awaited with interest.

As but a very few of our cavalry officers know anything whatever of these proposed drill regulations, the Editor of the CAVALRY JOURNAL tried, first, to procure a copy of the drill regulations with authority to publish the same but without success. Second, an effort was made to obtain from several cavalry officers who were present as observers and participants in the try out, their views as to the merits of the proposed drill and organization. This effort was partially successful only and there appears in this number of the JOURNAL reports or notes from two of these. The first is from one of the colonels of a participating regiment and which appears as an article. The second is from one of the captains of a participating regiment and was in the form of hastily prepared, pencil notes on the camp and the instruction given there. These notes are given herewith below.

A copy of a report made by one of the observers has also been received but, up to date, authority to publish the same has not been received. It is a careful prepared report and sets forth in detail the writer's objections not only to certain features of the proposed drill regulations, particularly as to the double rank formation, but also to any change in the organization of our cavalry regiments.

It has been learned that these tentative drill regulations are now in print and will soon be distributed to the cavalry regiments with a view of being tried out by them before their final adoption.

The notes referred to above are as follows:

NOTES ON THE CAVALRY CAMP OF INSTRUCTION
AT WINCHESTER.

The following notes on the conduct and results of the cavalry camp at Winchester are furnished by request and are given for what they are worth.

The Camp.

The camp was located on rolling, mostly uncultivated ground about six miles south of Winchester. There was some timber and a small stream, sufficiently large to water the animals, ran through the camp. There was a thin soil over a disintegrated slate which made the best possible surface for a camp. Even during a rain there was almost no mud and the dust was less than one had any right to expect in a camp where there were so many animals.

The rolling, open ground offered good cover, was easily traversed and sufficiently varied for all purposes but rather too steep for horses to stand comfortably on the picket lines. As a whole the camp site was ideal.

The camp was located close to two wagon roads leading to Winchester but there was no other means of reaching that town. Winchester is a dry town and was sufficiently distant from camp to prevent an undue amount of leaving camp.

The people were most hospitable, treated the enlisted men with consideration, made no attempts to run up prices on the supplies required for his personal use or his messes, and constantly

exerted themselves to show a friendly spirit both towards officers and enlisted men.

The discipline of the camp was excellent, making so good an impression as to call forth resolutions of approval from the Business Mens' Association of Winchester. The behavior of the command fairly earned this commendation which was a source of great satisfaction to have been given us voluntarily by the people.

The water supply from artesian wells was excellent, the camp clean and the health of the camp good. Statistics as to the health of the command would show little as all serious cases of disease or injury were promptly transferred to hospitals at posts. It seemed, however, as if there was no preventable sickness and complete statistics would show a sick report below the normal of the posts from which the troops came.

Tactical Instruction.

There was no attempt made to give any cavalry instruction of a technical nature except a few set demonstrations against an outlined enemy who was set up as a straw man to be demolished. The sole purpose of the camp was to teach a new drill regulation as drill and not for maneuvers. Many officers expressed regret that two and one-half regiments of cavalry should be assembled in camp for ten weeks without utilizing the opportunity to give officers and men a chance to work together at the kind of duties that would fall to a cavalry brigade in war.

Drill Regulations.

Each troop was required to furnish a platoon of thirty-three selected men, mounted on selected horses and under an officer. This platoon was permanently organized so that each man occupied the same position every day.

A set of tentative drill regulations—essentially the French Cavalry Drill Regulations—was furnished and no variation therefrom was tolerated.

After a couple of weeks of individual and platoon drill under these regulations, the platoons were organized into squadrons of four platoons each and after some further drill as squadrons, the squadrons were organized into two regiments of four squad-

rons each. These were sometimes exercised in a regiment of six squadrons. The two regiments were, towards the end of the camp, drilled as a brigade. Troops drilled three hours per day for six days in the week.

All fences were removed from the drill ground and some obstacles, about two and one-half feet high, were built in convenient places. The troops were then drilled to pay no attention to accidents of the ground or to the ordinary obstacles.

The troops were soon excellently well drilled in all the movements given in the tentative drill regulations, easily passed over broken country or took the above mentioned obstacles in line. Even considering the conditions—fences removed, best men on best horses, all previously trained, all men in same place each day and the platoons always led by the same officer—yet the results were better than was to be expected.

The new drill gives great facility for handling large bodies of horsemen in any kind of country and makes the command very compact and mobile.

Many officers would have liked to have seen what could be done, under the same conditions as to ground, men, horses, etc., with the old drill. That is, the demonstration of the new drill would have been more convincing had it been compared on the ground and under equally good conditions with not only the old drill but also with several suggested formations that were not permitted to be tried out.

Opinions differed as to what the demonstration showed. Hardly any of the officers thought the organization of our cavalry should be changed to accord with the new drill. A great many believed the double rank advisable and that the present Cavalry Drill Regulations should be changed accordingly and that the President should be urged to use his discretion and increase the enlisted strength of the troops now in service. Most officers thought that our present Drill Regulations should be revised.

The features of the new drill that seemed to be most universally accepted as an improvement were:

(a).—*Leadership*.—The platoon in double rank has sixteen files front with a corporal as center guide. The guide is always center for the platoon which is led as in the old "*Follow in trace*,"

the center guide following the platoon leader at a distance of a horse's length.

(b). *No attempt to keep long, straight lines.*—In the regiment, the squadrons are slightly echeloned so that the longest single line that is attempted is sixty-four files front.

(c). *The fan shaped deployment.*—Being in column of platoons, to form line to the front the first platoon continues moving straight to the front; the second platoon obliques to the right while the third and fourth platoons oblique to the left and form on the left of the original first platoon, the original second platoon being on the right of the line when formed.

(d). *The Charge.*—The charge as prescribed is made by turning the horse loose to go as fast as horse and rider can go, but the charge is not given until within fifty yards of the objective. In this short distance horses if turned loose to go their best do not get badly out of alignment and not having been pulling at the bit are ready to obey it when applied. Such charges have speed and vim, yet do not scatter as badly as in the old method of trying to keep good alignment throughout.

(e). *Silence.*—The drills, except at night or in a fog, are solely by signal.

(f). *Simplicity.*—There were ample movements prescribed for the efficient handling of troops but the number was vastly less than in the old Drill Regulations.

Results.

The drills were rather faster than one usually sees and over rough country so that the effect on horses and men cannot be fairly compared with the old formations.

The ambulance was a regular attendant at drills, probably averaging nearly a call per drill. This seemed rather frequent but one must remember that there were about eleven hundred men drilling.

The horses were frequently stepped on by their rear rank file, resulting in many cut heels and quite a few were injured in this manner well above the pastern, injuring the back tendon. There were a considerable number of sprained shoulders. Whether these came from more than the usual amount of galloping into and out of small ravines, from too much jumping

or from the quick turning is not clear. As the platoon swings around as did the old sets of fours, the flank horses get a lot of galloping and the leader must not go too fast or he will wind his flank horses. This may have caused some of the sore shoulders. At any rate many horses, not actually on sick report seemed to be tender in front.

Plugs have no business in this game. If the training at Winchester is to be followed as a precedent, the quality of our horses will materially improve. Only good horses are sufficiently active and hardy for such long and fast drills. The others will soon appear before the inspector.

In considering the results of the camp at Winchester it must be remembered that it was a *demonstration* of what can be done under the most favorable circumstances with the new tentative Drill Regulations. There was no attempt made to compare this organization or drill with any other and discussions along comparative lines were not welcomed.

A CARBINE FOR THE CAVALRY.

Referring to the editorial note on the subject of a carbine for the cavalry that appeared in the September, 1913, number of the *CAVALRY JOURNAL*, p. 352, where it is stated that experiments were being made in the line of producing a carbine or short rifle for our cavalry, the following will be of interest:

The Vice-President of the Cavalry Association, Major Sayre, has received a letter from an officer of the Ordnance Department from which we quote as follows:

"As you asked especially about a short rifle or carbine, I am sending you now a little memorandum that I believe gives the pertinent points about which you ask. This modified rifle, to all intents and purposes, is the same as the old carbine.

"I think that the Ordnance Department, as well as most other people, would oppose the issue of a special cartridge for the cavalry and the question of lightening the rifle therefore,

reduces to the ability of the shoulders of your men being able to stand the punishment. As you will see from the memorandum very fair ballistics can be obtained from a carbine with a shorter barrel."

MEMORANDUM REGARDING A SHORT RIFLE FOR THE CAVALRY.

A modified rifle has been submitted for consideration by a cavalry officer. The principal points are as follows:

- (a). The barrel has been shortened four inches.
- (b). The muzzle velocity is reduced from 2,700 f. s. to 2,600 f. s. and the muzzle energy from 2,425 ft. lbs. to 2,249 ft. lbs.
- (c). The energy of free recoil is increased to 16.85 lbs. against 14.98 for the service rifle.
- (d). For 1,000 yards the maximum ordinate is increased from 14.48 ft. to 15.63 ft. The weight is decreased from 8 lbs., 11 oz. to 7 lbs., 6½ ozs.

The modified rifle, however, resembles the old carbine and if a bayonet is to be used, the weight would have to be increased to provide for extending the stock and applying a front band.

While it is believed that the loss in ballistic properties as shown by the above memorandum amounts to very little in comparison with the advantage gained in the reduced weight, yet the increased recoil may prove a stumbling block in the way of a change. It is assumed that it would never do for the cavalry to have a special cartridge for their firearm and there will be no chance, therefore, to reduce the recoil without designing an entirely new weapon. What do our cavalry officers, who are experts in this line, think about it?

The following extracts from a letter received from one of our cavalry officers will prove of interest in this connection:

"You have two editorials in the last issue of the *CAVALRY JOURNAL* which struck me as being especially well timed. The only trouble with them was that they were not long enough and did not go sufficiently into details.

"One was that in regard to brigade posts. * * * The other was that referring to the carbine. I believe that if we could put it to a vote that the carbine would win out over the rifle by an overwhelming majority.

"If those who forced the rifle on our cavalry to replace the carbine had to command troops of horses, aged from four to twenty-four, here in this climate with that rifle hanging from the pommel of the saddle and wearing holes in the backs of their horses, they might get some idea of a proper arm for the cavalry.

"I have no sympathy with the idea that we should be prepared to compete with the infantry at rifle competitions. Why not compete with the field and coast artillery? We are not infantry and there is no more reason for trying to compete with them than with any other arm. We have not the time for such preparation with the rifle as to make such competitions at all equal if we pay proper attention to the other training necessary to make good cavalymen. At target practice we see two months spent with the rifle and two days with the revolver and not a day in the year in intelligent instruction in the use of the saber.

"The dismounted action of cavalry in war would seldom call for firing at greater ranges than 800 yards. Cavalry that cannot get that close to an enemy without suffering severe loss before going into dismounted action is not worth the name.

"It should be a simple matter to design a carbine which would shoot the present ammunition up to 800 yards as well and with as flat a trajectory as the present rifle and thus do away with much unnecessary weight and bulk. Who ever claimed that a man could do anything in the way of controlling his horse with a log under his knee."

OFFICERS' CHARGERS.

Herewith are reproduced photographs of four mounts of officers that have been furnished us for the purpose. As has been mentioned frequently before in the *CAVALRY JOURNAL*, it is believed wise and well worth the extra expense to publish cuts



HIGH CLASS.

Bay mare; 16 $\frac{1}{4}$ hands; 4 years old; weight 1,000 lbs.; by Watchman; out of Guardsman mare. Owned by Captain S. D. ROCKENBACH, 11th Cavalry.

of officers' chargers, with the view and hope that our cavalry officers will study and criticise the same to the end that they, particularly the younger officers, may become familiar with what is considered the best type for their mounts.

In this connection, attention is invited to the advisability of furnishing the photographs of horses for publication without a rider, this for several reasons.



ORLENE.

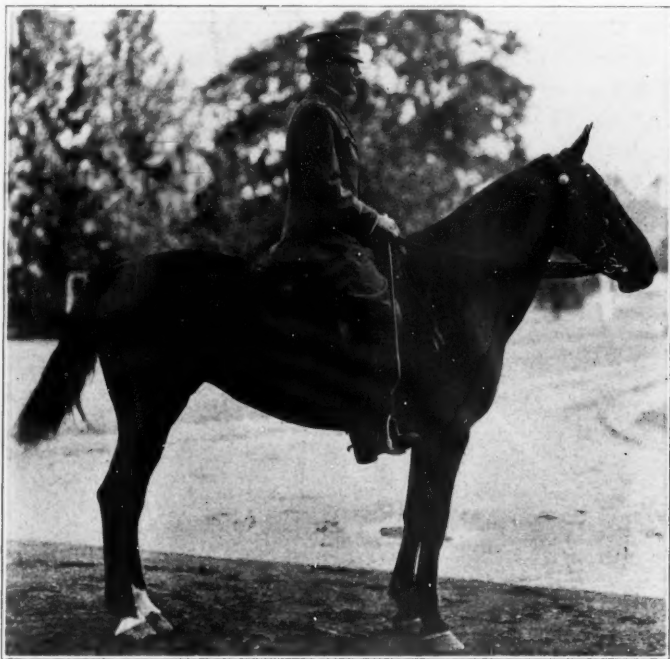
Chestnut colt, (thoroughbred) by Ornament; out of Pauline Derringer. 15-2½ hands, 4 years old, weight 1,075, girth 73 inches, bone below knee 8¼ inches.

This colt has the blood of Onandaga, Bend Or, Galopin, Doncaster, Thormanby, and Stockwell on his sire's side and of Spendthrift, St. Blaise, Lexington and Glencoe on his dam's side.

Second prize in "Military Horses" at the New York State Fair Horse Show, 1913. Ten entries in class. Owned and ridden by First Lieutenant WILLIAM R. POPE, Cavalry.

First.—No one cares, except possibly the immediate friends and relatives of a rider, who the rider is or how he looks; second, it usually makes the cut too large and, therefore, more expensive;

and, third, and more particularly, the conformation of the horse is shown much better without a saddle or rider. Also, the choice of the background when having photograph taken should be more carefully chosen than is frequently the case. This not



BONITA.

Black mare, 15½ hands, weight 1,075 lbs., 6 years old, girth 73 inches, bone below knee 5½ inches.

Sire "Gillig" (Morgan); Dam, Brunetta a standard bred mare out of Carmencita by Dudley. Owned and ridden by First Lieutenant WILLIAM R. POPE, Cavalry.

only so as to show the outlines of the horse to the best advantage but also to prevent the introduction of incongruous objects in the background that, in some instances, it has been necessary to have cut out of the plate at an additional cost.

A large photograph is generally much better than a small one for reproduction as the latter is frequently too indistinct or has such a poor background that it will not stand enlarging, while on the other hand, a large photograph can be reduced to any extent and the cut be thereby improved.



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BRIGADE POSTS.

The editorial, under the above title, that appeared in the last number of this JOURNAL brought forth two vigorous comments from two of our captains of cavalry, both of whom do not favor having cavalry garrisons larger than those for a single regiment. The first is from the pen of Captain Moseley and appears in this number, page 492. It is a well prepared discussion of this subject and deserves the careful consideration of our cavalry officers and those in authority. The second is from one not writing for publication, but who states: "While I am not writing this for publication, yet I felt like speaking my mind to some one and thought it best to send it to you. Possibly I am the only officer in the service with such ideas as these, but it will have its little part in influencing the editorial mind."

The writer's objection to brigade posts and with them the brigade commander and his staff appears to be, first, that these additional officers will have to be taken care of and will require additional details as orderlies, strikers, etc., and, second, that there will be interference on the part of the brigade commander with the instruction of the troops, squadrons and regiments. In other words that they will meddle with the duties of the captains, majors and colonels.

As to the first objection, while it is true, under present conditions, that additional men would have to be detailed for legitimate duties as orderlies, etc., and that thereby the strength of the men present for duty and instruction will be diminished to a certain extent, yet proper legislation or regulation could and should remedy this trouble by giving to brigade headquarters a detachment of orderlies as the regimental headquarters now have.

Regarding the second objection, it may be possible that some brigade commanders may be so constituted that they will never be able to keep their hands off of the regiments, squadrons and troops. We have had colonels who, in like manner,

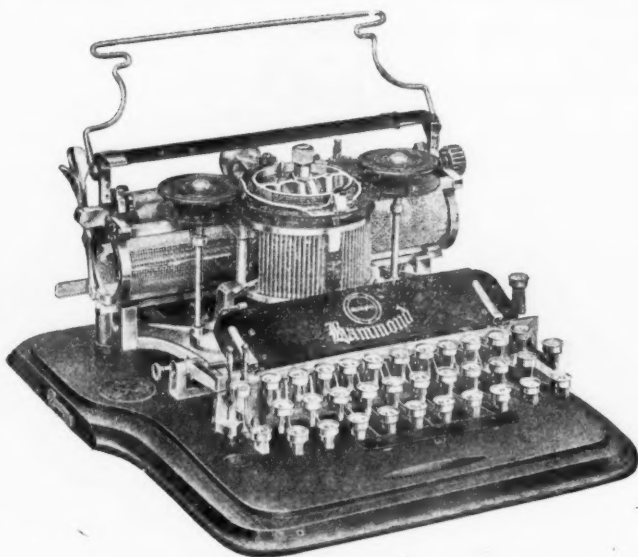
could not help trying to be majors, captains and even first sergeants as well as the colonel of the regiment and were continually meddling with every detail of their command instead of confining themselves to their legitimate duties of having a general supervision over the instruction and discipline of their regiments. The best police sergeant the writer ever knew was a colonel of cavalry.

Such colonels and brigade commanders have never learned and never will learn to command regiments or brigades. However, they are and will be the exception and not the rule, it is believed. The regulations on this subject of command and instruction should be so complete and explicit that no regimental or brigade commander could but help follow them and confine themselves to their proper functions. Such is the case in foreign armies and there the captains have the freest hand in the instruction of their troops, and the higher officers in the instruction of their respective commands and it is so prescribed in their regulations. The higher commandants, of course, as they should, have only a general supervision of the instruction of the lower units and it is only when some subordinate commander goes astray in his instruction that the colonel or other higher commander steps in and makes the proper correction. This, however, he does in such a manner that the subordinate only knows of it.

If we are ever so fortunate as to have a brigade commander who fails to appreciate the fact that he is the commander of a brigade and not of a regiment, squadron or troop, then that brigade is truly unfortunate and their commander will be a failure in time of peace and still more so in war. This same remark is equally true of a colonel as regards his regiment or of a major as regards his squadron. Such officers, of whatever grade, should be eliminated.

The writer still believes in brigade posts but we will never have them in our day and generation.

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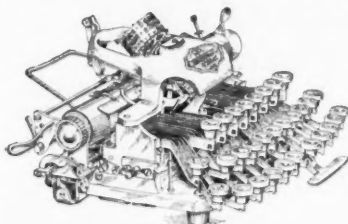
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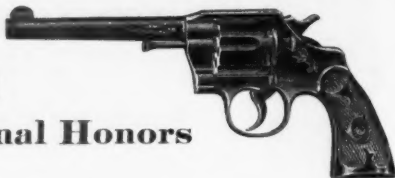
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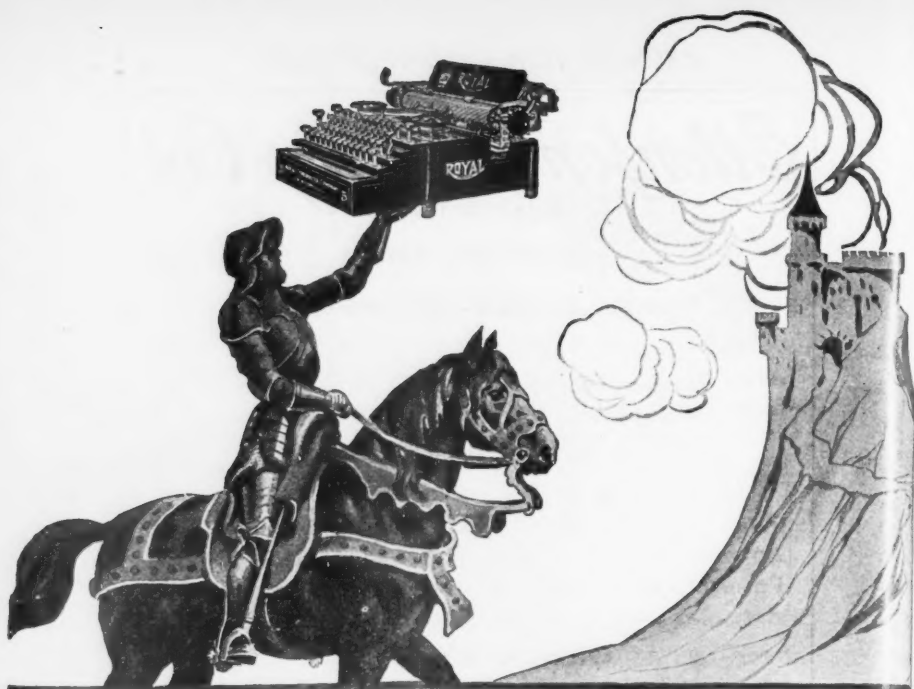
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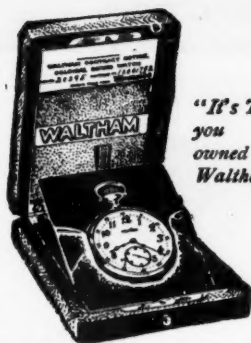
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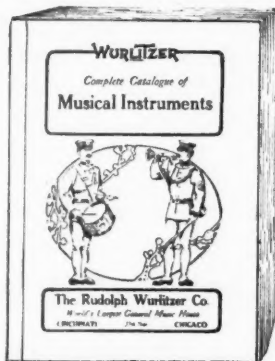
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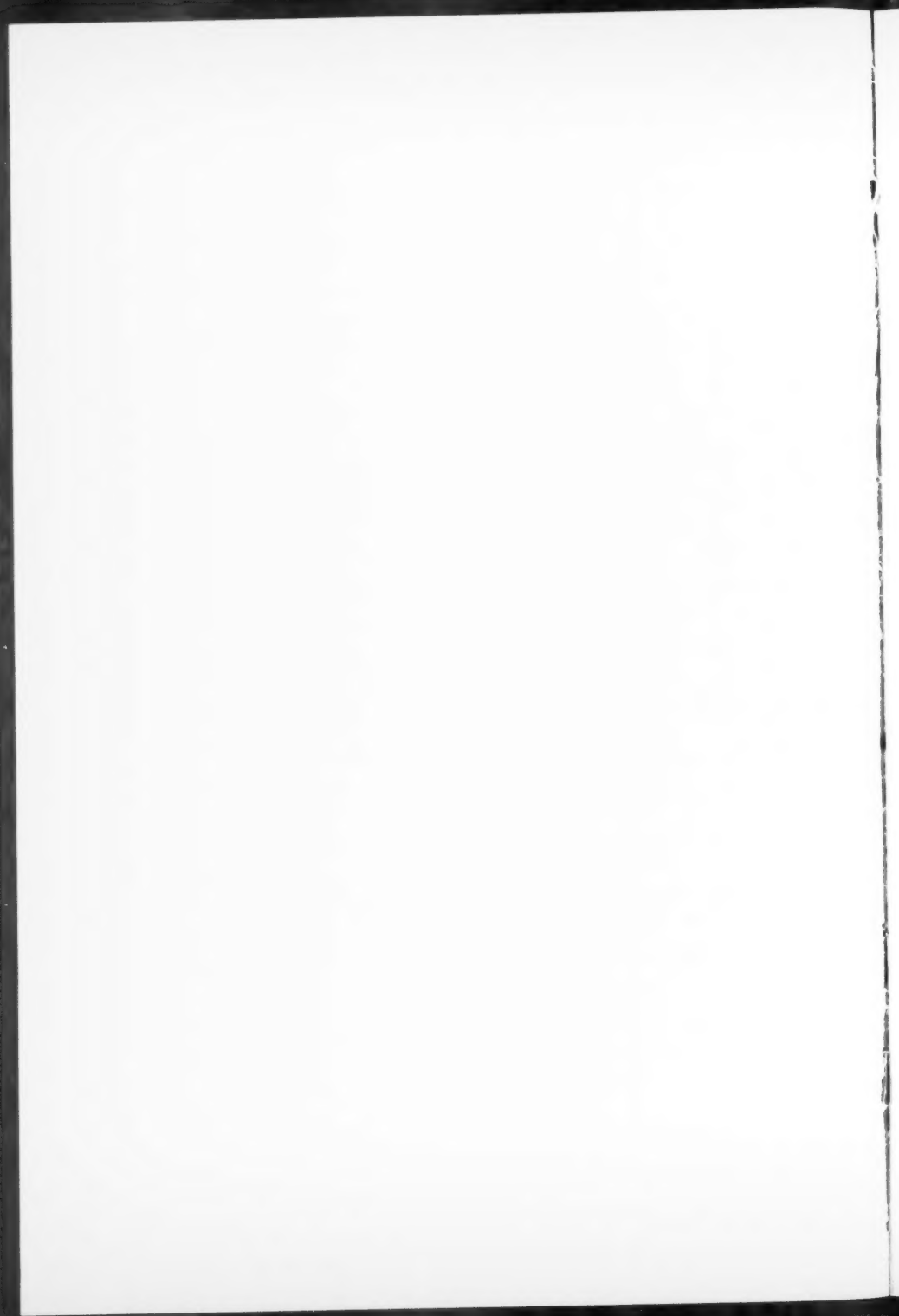
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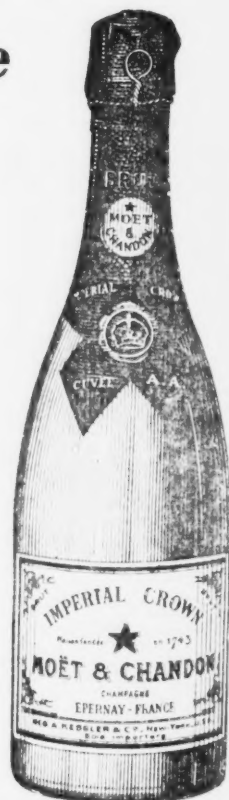
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